

MATURITY MATTERS: HOW EGO DEVELOPMENT HELPS
CHINESE-CANADIAN BICULTURALS FLOURISH

by

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ABSTRACT

This study explores bicultural identity integration (BII) processes of adult Chinese-Canadians. Research has indicated that BII is generally associated with higher levels of psychological well-being in immigrants. During their bicultural integration, immigrants undergo a significant process of personal development as they mature and become more capable in their new cultural communities. Connections among processes of psychosocial maturity (Loevinger's ego development), well-being and bicultural identity provide the central focus for this investigation. All questionnaires in this investigation were presented in full bilingual format with both English and Chinese translations for all questions. A moderation analysis examined ways ego development may shape the relations between bicultural identity integration and psychological well-being. Using self-report instruments, data were collected online from a sample of 104 Chinese-Canadian bicultural adults. Results revealed that an overall model incorporating bicultural identity integration, ego development, and a moderation effect significantly predicted psychological well-being, explaining 26% of the variance of psychological well-being for our Chinese-Canadian bicultural sample. Examination of several features of moderation patterns revealed a modest moderation trend involving the blendedness & compartmentalization dimension of BII, $p = .053$, $\Delta R^2 = .03$, in explaining well-being. Although not statistically significant, the trend offers substantive guidance for future research. The bilingual presentation of items provided an environment to simultaneously evoke both cultural frames for participants, as demonstrated in language use patterns and participant comments. This pattern of results suggests that future research is warranted to further explore processes of bicultural integration development of Chinese-Canadian biculturals.

Keywords: Chinese-Canadian; biculturalism; ego development; psychological well-being;
bilingual research processes

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CHAPTER 1: INTRODUCTION

One out of five Canadians is foreign-born and most of these people immigrate at relatively young ages (Statistics Canada, 2011). Canada is historically a nation of immigrants, where many different, but predominately European, cultures migrated. Canada's political story is an integration of French and English cultures, into a bilingual governmental entity encouraging widespread biculturalism. Similarly, as a consequence of immigration, Canada's indigenous people became embedded in an emergent culture of European descent, making their social existence increasingly bicultural.

In more recent decades, immigration patterns to Canada have shifted away from European ancestry to more visibly diverse cultural origins leading to seismic demographic shifts in places like Richmond, British Columbia, where Asian and South Asian immigrants have become the dominant cultural groups. In fact, Richmond is now in contention to be one of the most "hyper-diverse" cities on the planet ("Richmond: Globe centre," 2015). This illustrates that Canadian society has become a diverse and complex multicultural tapestry, which is intentionally recognized and supported by the Canadian Multiculturalism Act, passed into law in 1988. Consequently, Canada has become a place where bicultural identity is increasingly prevalent and recognized, making the study of how individuals in Canada integrate their different cultures an increasingly important research area.

This present study explored the bicultural identity integration processes (BII) of adult Chinese-Canadians. Research on bicultural processes has been largely quantitative in nature and focusing on variations of cultural integration strategies (Benet-Martinez & Haritatos, 2005; Berry, 1990; Berry, 1997; Berry, 2003; Chen, Benet-Martínez, & Bond, 2008; Nguyen & Benet-Martínez, 2013; Van Oudenhoven, Ward, & Masgoret, 2006). This research project sought to

broaden the current empirical understanding of bicultural identity processes by investigating its relationships with ego development and psychological well-being in Chinese-Canadians. BII unfolds in individuals, families and communities who have been exposed to and have internalized two cultures, such as immigrants, refugees, and ethnic minorities (Benet-Martinez & Haritatos, 2005; Chen, Benet-Martínez, & Bond, 2008; Nguyen & Benet-Martínez, 2013). These immigrants often face challenges associated with living between and with two cultures. Those challenges encourage people to develop bicultural identities and to develop their capacity to flourish, living with both their heritage cultures and their host cultures.

Research has indicated that BII is generally associated with higher levels of psychological well-being (PWB) in immigrants (Downie, Koestner, ElGeledi, & Cree, 2004; Downie, Magneau, Koestner, & Liodden, 2006; Phinney, Horenczyk, Liebkind, & Vedder, 2001). Furthermore, immigrants' perceptions of PWB are fundamental to their successful navigation through life's challenges (Ryff, 1989; Ryff, 2008; Ryff et al., 2014; Ryff & Keyes, 1995).

Another factor that has been frequently associated with higher levels of psychological well-being is personal maturity or the level of ego development (Bauer & McAdams, 2004; Bauer, Schwab, & McAdams, 2011). During their bicultural integration, biculturals undergo a significant process of personal development as they mature and become more capable in their new cultural communities (Berry, 2005; Boski, 2008). This process highlights the role of ego development in biculturals' well-being. Loevinger's measure of ego development captures an important dimension of psychosocial maturity (Hy & Loevinger, 1996) with post-conventional levels of ego development reflecting higher maturity levels that support the flexibility and complexity that emerge from dealing with diverse social and cultural contexts. Thus, it can be

anticipated that post-conventional ego development could facilitate BII and, therefore, might enhance the relationship between BII and PWB.

CHAPTER 2: LITERATURE REVIEW

In this chapter, I will review the key constructs for my study: Psychological Well-Being (PWB), Bicultural Identity Integration (BII), and Ego Development (ED).

Psychological Well-Being (PWB)

According to Kahn and Juster (2002), “well-being is an overall state of each individual, a summation or outcome of a person’s varied life experiences, and that it is relatively stable, unaffected by momentary emotional variations or events” (p. 634). In positive psychology, well-being encompasses subjective, biological, and functional health. Subjective health is how people experience the quality of their lives. People with a high subjective quality of life are energized and experience an internal locus of control, optimism, high life satisfaction, and a high sense of engagement and meaning. Biological health refers to how one’s body feels and functions overall. Functional health refers to the degree to which a person’s interactions within the self and with others are positive experiences (Seligman, 2008).

Ryff (1989) has researched extensively on the topic of psychological well-being. Her work draws from the ideas of many foundational psychological theories including Erikson’s psychosocial stages, Buhler’s basic life tendencies, Neugarten’s personality changes, Maslow’s idea of self-actualization, Allport’s formulation of maturity, Roger’s concept of the fully functioning person, and Jung’s individuation principle. Each of these theories has alluded to the idea of psychological well-being, but Ryff argued none of them have clearly defined the concept. Ryff maintained that previous literature on this topic has given a narrow view of positive psychological functioning, focusing more on short-term affective well-being, such as happiness (Bradburn, 1969) and life satisfaction (Andrews & Withey, 1976; Diener, Lucas, & Shigehiro, 2002). Contrary to previous literature, Ryff believed that happiness was not a dimension of

psychological well-being; rather it resulted when one was experiencing the qualities of psychological well-being. Ryff proposed a new conceptualization of a construct of psychological well-being (PWB), which she asserted should be measured based on six distinct dimensions that were neglected in prior studies, including self-acceptance, personal growth, purpose in life, positive relations with others, environmental mastery, and autonomy. Furthermore, an individual's skills and perceptions of psychological well-being are fundamental to successful navigation through the challenges of their life (Bowman, 2010; Diener, Lucas, & Shigehiro, 2002). Finally, greater psychological well-being contributes to increased social support, greater life satisfaction, and improved physical health (Kitayama & Markus, 2000; Ryff, 2008).

Ryff (1989) recruited 321 participants consisting of men and women, divided into young, middle-aged, and older adult groups to examine the lifespan patterns of the six PWB dimensions. The Scales of Psychological Well-being (SPWB) was administered along with eight other existing well-being measures in the assessment battery. Regression analyses showed correlations between the SPWB and the positive functioning from existing well-being measures were all positive and significant; and correlations between the SPWB and the negative functioning from prior measures were all negative and significant. Ryff concluded that these findings support the validity of the SPWB. The major limitation to this study is that some of the scales seem to correlate too highly with each other, suggesting that there could be too many or overlapping factors. This leads to questions of the construct validity of the internal structure of the measurement. Despite this limitation, the study demonstrates the theory driven rigour behind Ryff's PWB construct. This study is also concerned with age and gender differences, which lends its utility across a large population. This work is indispensable in providing the theoretical

framework of PWB that I used as a part of the present study. First, Ryff's theory strengthens the theoretical basis of the present research. Specifically, her focus on positive functioning across life span invites consideration of alternative pathways to growth. Second, the study's age and gender variances provide interesting data to offer insights in the developmental and social role aspects of well-being and support this project's proposed linkage between well-being and ego development.

In a follow-up study, Ryff and Keyes (1995) revisited the theoretical model of psychological well-being. The six dimensions remained the same, but data was expanded to a nationally representative sample of 1108 male and female adults aged 25 and above through telephone interviews. The researchers administered a shortened version of the SPWB and also included three other single-item indicators of happiness and life satisfaction. Results were compared with two prior investigations and correlated with prior measurements of well-being. The researchers concluded that the results from confirmatory factor analyses supported the validity of the SPWB and demonstrated that the multidimensional model of SPWB is superior in fit over prior single-factor models.

A major limitation to this study is the researchers' use of a shortened SPWB, which omitted 9 out of 14 items from each of the six factors. Although the decision is justified given the limitations of time and resources available for such a large national sample, caution must be applied when choosing between the shortened scale and the original. Furthermore, the shortened scale has not been cross-validated, given that this study was its first use. Despite the limitations, the researchers have once again demonstrated the theory driven focus behind their PWB construct through comparisons with prior research. The nationally representative data also add to the strengths of their study. In addition, the researchers were able to replicate prior findings on

age and gender differences. This work is important in broadening the sample data on the SPWB available for my current study.

Curhan et al. (2014) investigated the relationship between subjective and objective hierarchies and psychological well-being by comparing samples of 1027 Japanese adults aged between 30 to 79 and 1805 American adults aged between 34 and 84 who were randomly selected from national working telephone banks. Participants completed self-administered questionnaires on background information, the Scales of Psychological Well-being (SPWB), and two other prior measures of well-being. The Japanese version was back-translated by native speakers to maintain consistency of the measurements. Objective social status was operationalized based on education levels while subjective social status was measured on a 10-rung community ladder. Demographic variables that have been shown to predict well-being such as age, gender, and marital status, were controlled with comparable means between Japanese and American samples. Hierarchical linear regression was used to analyze differences between the influence of objective and subjective social status on PWB. The researchers found that subjective social status was a stronger predictor of PWB in the United States than in Japan and objective social status was a stronger predictor of PWB in Japan than in the U.S. The researchers concluded that the differences demonstrate contrasting concepts and experiences of well-being, which is culturally dependent.

This study was quantitatively robust and the researchers were candid with their limitations, including the need to further study the effect of social status on PWB and for additional empirical work in both cultures to further elucidate the cultural differences. Results from this study are relevant to my current study in three significant ways. First, it connects the concepts of the influence of culture to PWB. Second, although their samples were obtained from

Japan and the U.S., parallels can be drawn to comparisons between China and Canada, given the similarities of social hierarchy in Confucian heritage and Western cultures. Third, the divergent cultural experiences of social status shed light on possible difficulties that biculturals could encounter as a result of shifting between two different social structures.

In sum, the construct of psychological well-being is well understood and has been shown to be stable across a national level. Moreover, it is well cross-validated in international research. Previous research has shown support for the connection between maturity and psychological well-being (Ryff et al., 2015). This is not only a strength of Ryff's program of study, but it also establishes a baseline for my study. The nature of the construct is presented to us largely through quantitative strategies of investigation, which raises interesting questions about how the quantitative paradigm might fit with anthropological studies and qualitative studies that might emphasize the richness of cultural experience. The significant implication of this construct for this study of bicultural processes is that research has shown higher levels of psychological well-being is often found in individuals using the integration strategy of acculturation (Phinney, Horenczyk, Liebkind, & Vedder, 2001).

Bicultural Identity Integration (BII)

Bicultural individual are those who have been exposed to and have internalized two cultures. Biculturals can include anyone from more traditional understandings such as immigrants, refugees and ethnic minorities, to newer types of hybrids as a result of globalization, such as international students, missionary kids, and those who are in interethnic relationships (Benet-Martinez & Haritatos, 2005; Chen, Benet-Martínez, & Bond, 2008; Nguyen & Benet-Martínez, 2013). Summarizing the primary acculturation literature (Berry, 2003; Van Oudenhoven, Ward, & Masgoret, 2006), Huynh (2009) identifies two central tasks of living

between two cultures: (a) “the extent to which they are motivated (and/or allowed) to maintain their ethnic culture and identity; and (b) the extent to which they are motivated (and/or allowed) to be involved in the host culture” (p. 2). People who move among cultures typically utilize four acculturation strategies in resolving these two issues: assimilation, separation, integration, and marginalization (Berry, 2003, 2005). Integration, often referred to as biculturalism, has been found to be the most common strategy of acculturation (Berry, 2003; Berry, Phinney, Sam, & Vedder, 2006). Moreover, current research shows there are five distinct conceptions of the integration strategy within the broader acculturation literature (Boski, 2008).

The present study focused on the bicultural identity integration framework proposed by Benet-Martínez and her colleagues (Benet-Martínez & Hong, 2014; Huynh, Nguyen, & Benet-Martínez, 2011; Nguyen & Benet-Martínez, 2010). Bicultural identity can be loosely defined as distinctive ideas, customs, social behaviour, or ways of life of two cultures that a bicultural individual identifies with. Biculturals encounter daily challenges of negotiating and integrating between competing identities, values, customs, and expectations. This integrating work of biculturals may be characterized as a developmental process. Specifically, Benet-Martínez, Leu, Lee, and Morris (2002) describe bicultural identity integration as a process that “captures the degree to which biculturals perceive their mainstream and ethnic cultural identities as compatible and integrated vs. oppositional and difficult to integrate” (p. 9).

Empirical method – BIIS-2R. Benet-Martínez and her colleagues have built an extensive empirical research program on the Bicultural Identity Integration Scale (BIIS) from 2002 to the present. The current study focused on the most recent version, BIIS-2R (Huynh, 2009; Huynh, Nguyen, & Benet-Martínez, 2011). The BIIS-2R was developed as an individual difference construct that successfully describes patterns of biculturalism among those who have

integrated two cultures. Put differently, bicultural identity integration is seen as a construct that illustrates how each bicultural person perceives his or her bicultural identity.

Their empirical work has psychometrically demonstrated two distinctive dimensions of bicultural identity integration, including cultural blendedness and cultural harmony, which are conceptually independent and differentially related variables (Huynh et al., 2011). Consequently, bicultural individuals can be high in both blendedness and harmony, or low in both, or any combination of high and low. Cultural blendedness is predicted by several acculturation variables including “more years in the US, higher English language proficiency and use, lower other language proficiency and use, stronger U.S. cultural identification, greater bicultural competence, and weaker separation attitudes” (Huynh, 2009, p. 19). On the other hand, cultural harmony was predicted by “lower acculturation stress and lower neuroticism” and associated with greater psychological adjustment (p. 44).

Conceptual approach of dynamic constructivism. Their use of individual difference construct is significant, as Benet-Martínez et al. emphasize their bicultural construct in terms of subjective, individual perceptions of bicultural identity, which distinguishes their work from Hofstede’s (1983) conception of objective comparisons between cultural differences across nations. Furthermore, Benet-Martínez et al. describe the characteristics of the two distinct dimensions of BII in terms of their associations with other relevant domains of human functioning, including personality, social and contextual pressures, acculturation orientation and stressors, and demographics (Benet-Martínez & Haritatos, 2005; Hong, Morris, Chiu, & Benet-Martínez, 2000; Huynh, 2009; Huynh, Nguyen, & Benet-Martínez, 2011).

Cultural blendedness vs. compartmentalization. This dimension depicts the performance and cognitive aspects of the BII construct related to the “perception of differences

between a person's two cultures" (Huynh, 2009, p. 36). It can also be understood as "the degree of dissociation versus overlap perceived between the two cultural orientations" (Huynh et al., 2011, p. 830). For example, participants who score higher in cultural blendedness may identify more with phrases such as "I am a Chinese-American"; conversely, participants who use more of the compartmentalization strategy tend to use phrases such as "I see myself as a Chinese in the United States" (p. 830). Moreover, in a study comparing Chinese-American and Latino-American participants, Huynh (2009) found that:

Individuals high on cultural blendedness also tend to be more American: they have spent more time in the U.S. (if they are immigrants), have higher English proficiency and use English language more often with fewer language barriers, are more identified with American culture, and more oriented toward American culture overall. (p. 45)

Cultural harmony vs. conflict. This dimension involves the affective aspect of the BII construct in terms of "the degree of tension or clash versus compatibility perceived between the two cultures" (Huynh et al., 2011, p. 830). Here, contextual pressures tend to be the stronger influencing factors. Individuals who are high on cultural harmony tend to use phrases such as "I do not see conflict between the Chinese and American ways of doing things"; conversely, individuals who are high on cultural conflict identify more with phrases such as "I feel trapped between the two cultures" (p. 830). Moreover, these individuals "tend to have lower neuroticism, stronger feelings of belonging and positive affect toward their ethnic groups, and perceive fewer stressors associated with the acculturation process" (p. 45). Cultural harmony is also associated with greater well-being and lower psychological distress (Huynh, 2009).

Empirical research on bicultural identity and integration. Benet-Martínez and Haritatos (2005) recruited a total of 133 male and female first-generation Chinese American

individuals with a mean age of 24.5 years from the community of the University of Michigan participated in this research. All of the participants met the bicultural inclusion criteria. The participants completed a battery of questionnaires including their demographics information, an acculturation questionnaire, the preliminary Bicultural Identity Integration Scale (BIIS-P), the BIIS-1, and the Big Five Inventory (BFI). The researchers concluded that the results of their correlational and path analyses supported their hypotheses that BII is not a single dimensional construct, rather, there indeed seemed to be two independent dimensions: cultural blendedness and cultural harmony. Furthermore, the researchers discovered that due to the independent nature of the dimensions, BII should perhaps be understood as an emergent phenomenon stemming from variations in cultural blendedness and cultural harmony that may be more appropriately conceptualized as a process construct.

Chen et al. (2012) conducted five studies to examine the role of the dialectical self on psychological well-being and bicultural identity integration. The researchers defined the dialectical self as the East Asian tendency to tolerate contradictions and ambiguity and hypothesized its mediating effect between BII and psychological adjustment. Moreover, the researchers hypothesized that individual experiences of BII and psychological adjustment will differ between globalization-based and immigration-based acculturations. The same instruments were used across all five studies to measure the dialectical self, BII, self-esteem, subjective quality of life, perceived stress, language proficiency, and cultural identification. Acceptable sample sizes were obtained for all five studies and all participants met bicultural selection criteria. The first three studies focused on globalization-based acculturation of Hong Kong and Mainland Chinese university students while the latter two studies targeted immigration-based acculturation of Mainland Chinese and Filipino immigrants to Hong Kong recruited from local communities.

Results across all five studies indicated psychological adjustment is positively correlated to BII and negatively correlated to dialecticism. However, while the mediating effect of dialecticism was significant across the first three studies, no significance was found in the latter two studies.

One notable limitation of this research project is the difference of sample characteristics between the first three and last two studies. It can be argued that university students would likely experience different aspects and levels of acculturation than older individuals from communities, depending on life stages, education, access to resources, language proficiency, and adaptation skills. Thus, comparisons made by the researchers on globalization-based and immigration-based acculturations should be read with caution. Despite these limitations, this study made substantial efforts in bringing forth the importance of considering different bases of acculturation. More importantly, parallels can be drawn between psychological adjustments studied in this project and the component of psychological well-being (PWB) and ego development (ED) that I proposed in this current project, providing further basis of the possible relationship between PWB and BII.

In another study, Cheng, Lee, and Benet-Martínez (2006) examined the possible link between cognitive complexities and biculturalism. The researchers recruited 179 male and female participants from the University of California with a mean age of 20.7 years, 79 of whom self-identified as monocultural Anglo-American and 100 of whom self-identified as first generation Chinese American biculturals. Participants were randomly assigned to one of three groups for this experiment: Chinese group, American group, or Landscape group, and were presented with 10 pictures. After viewing the pictures, participants were instructed to describe, in sentences, what they saw. Responses were then content coded independently by one Anglo-American and one Chinese-American coder who were blind to the researchers' hypothesis.

Principle component analysis was used to examine three distinct factors: density, abstractness, and differentiation-integration, of the ideas and concepts present in each response statement.

The researchers found that the results provided tentative support that the cognitive complexities of Chinese-American biculturals were higher than monoculturals, either Chinese or American, in the first two factors; however, the third factor, differentiation-integration was not confirmed.

Two limitations were present in this study. First, dividing a sample of 179 into two sub-groups considerably reduces the sample size of each sub-group, combining this small sample size with the convenient sampling of university participants means the likelihood of higher sampling error and lower generalizability of the results to the population. Second, the use of pictures as cultural primes seems problematic given that associations of visual stimuli could be influenced by many other factors beyond cultural experiences. In spite of these limitations, this study provides important initial support for the complexity of biculturals in the way they conceptualize culture as a result of their repeated cultural frame switching experiences. Such acquired complexities could provide interesting discoveries germane to the possible interacting relationship between biculturalism, ego development and psychological well-being proposed in this current study.

Additional aspects of bicultural identity and bicultural frame integration are being examined by a variety of researchers, including qualitative investigators (e.g., Boski, 2008; Chau, 2009). In a previous thesis, narrative mode of engagement was proven effective in allowing the more nuanced aspects of biculturalism to emerge. In particular, Chau (2009) used narrative analysis to bring to light the process of how Hong Kong immigrant identities shifted as the result of their lived experiences in Canada and the emergence of a new cultural space as the result of their bicultural experiences.

The major strength of the research program developed by Benet-Martínez and her colleagues is the largely quantitative data accompanying their bicultural identity integration construct, which provides meaningful results and further understanding of the diverse acculturation experience of Chinese biculturals. Moreover, their two dimensional framework of BII processes incorporating cultural blendedness and cultural conflict offers a more complex and nuanced conception of the integration strategy within the acculturation literature. The complexities of biculturalism have emerged from accomplishments of quantitative research programs like those of Benet-Martínez and her colleagues, from the broader quantitative literature on acculturation (Boski, 2008), and from qualitative research (Chau, 2009). The goal of this present project was to continue this research program by adding the maturity component as measured by Loevinger's ego development construct.

Ego Development (ED)

Loevinger's work is often not well understood because of the presumed similarities with the work of Freud or Piaget. In actuality, her work mainly draws upon H. S. Sullivan's interpersonal psychiatry, Merleau-Ponty's phenomenology, and Erikson's psychosocial theory of development (Loevinger, 1976). More importantly, Loevinger differentiated her work from the Freudian understanding of basic needs driving action and the Piagetian adoption of cognitive disequilibrium as the central principle for development. Furthermore, similar to H. S. Sullivan, who informed his conceptual transformation of depth psychology with his profound experience in clinical work, Loevinger, as a psychometrician, systematically gathered data from an extensive variety of groups in order to refine both her empirical and conceptual understandings of ego development. Because of her emphasis on deriving and grounding her construct on empirical evidence, Loevinger (1976) asserts that definitive definitions are not a characteristic of

her work, rather, she uses “impressionistic descriptions” to elucidate the immensely complex phenomenon of ego development (p. 13). What she does claim is that “ego development is at once a developmental sequence and a dimension of individual differences in any age cohort, but this description does not suffice as a definition, for mental age can also be described so” (p. 13). Therefore, for the present discussion of Loevinger’s (1976) conception of ego development, the most straightforward path is to outline her overall formulation of the nine stages (see Table 1).

When referring to these stages, it is important to note that many studies commonly distinguish post-conventional participants as those who score at or above the self-aware level.

Conceptual outline of Loevinger’s developmental framework. Broadly speaking, Loevinger conceives of ego development as the developmental processes shaping an individual’s emerging perceptions of his or her self-system (1976, 1997, 1998b). The search for coherent meanings in experience unfolds in a framework for life that embodies the key function of the ego in Loevinger’s model (Hy & Loevinger, 1996). The level of ego development, thus, refers to her conception of the degree of an individual’s psychosocial maturity. Specifically, key aspects that characterize Loevinger’s construct include process, holism, social origin, and purpose and meanings.

Process. In Loevinger’s (1976, 1997) model, the nine stages are descriptive patterns of distinctive processes that characterize an individual’s “striving to master, to integrate, to make sense of experience”, which Loevinger contends is “not one ego function among many but the essence of the ego” (p. 59). In this sense, process is an overarching principle in Loevinger’s conception of ego development.

Holism. The key idea is that while a person’s cognitive, behavioural, and physiological functions can be studied, the whole person is the primary subject of study. Even when focusing

on specific processes such as ways of thinking, a psychologist cannot afford to lose sight of the holistic patterns of a person's way of life.

Social origin. Developmental processes of self are intrinsically connected to others. Loevinger holds, as with most ego theorists, that a person is social by nature. This is a view that stretches back to antiquity, including roots in the works of Socrates, Plato, and Aristotle.

Purpose and meanings. Motivational patterns essential to developmental processes of self are focused on purpose in human life. Consequently, behaviour and self-development is meaningful. Put differently, what the self means to a person characterizes the organization of stages within Loevinger's theory. In this sense, Loevinger (1976) argued that ego is not driven simply by meaningless impulses or needs. Rather, ego functioning is guided by purpose and its resulting behaviours carry meaning forward in life narratives. Parallel arguments were also promoted by Merleau-Ponty's (1963) philosophy of levels of organization.

Empirical research on ego development. Westenberg and Block (1993) studied the relation of ego development and individual differences in personality. Participants were recruited from the Block and Block Longitudinal Study. At age 14, the study began with 104 participants. At age 23, data was available for 98 participants in three domains: ego development, personality, and intelligence. The measure of ego development was Loevinger's Washington University Sentence Completion Test (WUSCT). Several judges (four to six) assessed personality through interviews using the California Adult Q-Set (CAQ). Verbal fluency was assessed by the Wechsler Intelligence Scale—Revised (WAIS-R). Here, the assessment of a participant's verbal fluency is important in clarifying its possible influence on his or her ego development scores.

Table 1
Characteristics of Ego Development Milestones

Level	Characteristics		
	Impulse control	Interpersonal mode	Conscious preoccupation
Impulsive	Impulsive	Egocentric, dependent	Bodily feelings
Self-protective	Opportunistic	Manipulative, wary	“Trouble,” control
Conformist	Respect for rules	Cooperative, loyal	Appearances, behaviour
Self-aware	Exceptions allowable	Helpful, self-aware	Feelings, problems, adjustment
Conscientious	Self-evaluated standards, self-critical	Intense, responsible	Motives, traits, achievements
Individualistic	Tolerant	Mutual	Individuality, development, roles
Autonomous	Coping with conflict	Interdependent	Self-fulfillment, psychological causation
Integrated		Cherishing individuality	Identity

Note. Adapted from “Measuring ego development” by L. X. Hy and J. Loevinger (1996), Mahwah, NJ: Lawrence Erlbaum.

The findings indicate that: (a) increased ego development was associated with ego-resiliency and interpersonal integrity, (b) the Conformist level was associated with conformity, and surprisingly, the Conscientious level was also associated conformity; and (c) ego level was not associated with self-ease and expressiveness-playfulness. This study has clearly shown interesting connections between ego development and individual differences in personality and is therefore helpful for the present project. First, a key implication of this study helps us see the importance of verbal and language fluency in influencing ego development scores. This insight lends support for the current project's chosen bilingual research format, as this strategic format was crucial in creating a rich environment for bicultural participants. Second, this study conceptually emphasizes connections between ego development and personality, showing us how alternative ways of viewing the world and ourselves can be pursued differently.

Loevinger's program of research continues to refine her theory of ego development over the past 40 years. For example, the Washington University Sentence Completion Test (WUSCT) has undergone several revisions and extensions. Novy and Francis (1992) investigated the two halves of the shortened version of WUSCT for tau-equivalence (that is, tests that are not interchangeable) and parallelism (that is, tests that are interchangeable). The researchers recruited 265 participants representing a mixture of ages and backgrounds. The results indicated that: (a) the parallel model continues to clarify the strong psychometric characteristics of the instrument, and (b) there is empirical evidence that justifies the reliability and equivalency of the shorter form of the test.

There are three strengths found in this study. First, the researchers are independent from the proponents and authors of the WUSCT. Second, the sample captured diverse representatives of the population, including male and female participants aged between 18 to 75 years, with

educational background ranging from elementary school to post graduate studies, and ethnicity background inclusive of white (76%), Hispanic (12%), black (10%) and Asian (2%). Third, the findings empirically validated the short form of the WUSCT, which makes it an interchangeable and reliable option for this current project should there be time constraints.

Westenberg and Gjerde (1999) examined ego development during adolescence to young adulthood transition. The authors identified three limitations of previous longitudinal studies, (a) the studies were over relatively short periods of time, (b) the individuals studied were in either their adolescent or their post-adolescent years, (c) the attrition rates were very high. The researchers expanded our knowledge by examining a 9-year period from age 14 to age 23. Male and female participants were recruited from the Block and Block longitudinal study of ego development and cognition, which assessed participants at ages, 3, 4, 5, 7, 11, 14, 18, and 23. At age 14, the ego level of 104 participants were assessed by the Washington University Sentence Completion Test (WUSCT); at age 23, 100 participants were assessed by the WUSCT; resulting in 98 participants with WUSCT scores at both ages. Analysis of variance was conducted. The researchers concluded that key findings of the age 14 to age 23 study period supported all five of their hypotheses: (a) the average ego development gain is 1.5 steps, (b) the variance in ego development increases with age, (c) there is a low to moderate relation between ego level at age 14 and 23, (d) the timing and extend of ego development varies widely between individuals, and (e) individuals who have reached the Self-aware level experience a slow down in ego development.

This study lends several strengths to furthering my understanding of ego development for my present project, including minimal attrition rate, the completion of an ambitious longitudinal

study spanning across 9 years, and the developmentally dynamic period of adolescence to young adulthood studied.

The strength of Loevinger's work is in her profound empirical accomplishment throughout her research program over many decades. Her construct of ego development highlights the developmental processes of self and identity, and clarifies a holistic model of psychosocial maturity. Others have continued her psychometric, empirical, and theoretical refinements in recent empirical work. In particular, for the purpose of the present study, there has been growing interest in the universality of the ego development construct. As such, her measure of ego development, the Washington University Sentence Completion Test (WUSCT) has been translated into 11 languages and is widely used internationally. To this end, studies have been conducted using the WUSCT in both Western cultures and non-Western societies, including Japan, Vietnam and India, showing its promise to biculturalism work (Loevinger, 1998).

As Loevinger (1976) states, "The conception of ego development as a sequence of *stages* that also constitutes a set of personality *types* is necessarily an *abstraction*" (emphasis in original, p. 67). Moreover, as previously reviewed, she summarizes that "the fundamental characteristics of the ego are that it is a *process*, a *structure*, *social* in origin, functioning as a *whole*, and guided by *purpose* and *meaning* (emphasis in original, p. 67). Drawing on the framework of meaning that ego development is tracking, a parallel connection can be made to tracking biculturals' integration of their different cultural frameworks of meaning. Moreover, as development is ongoing for everyone and cultural identity is a holistic process, there exists an intertwining relationship that leads to the same level of analyses when considering bicultural identity

integration and ego development. Thus, it makes sense to anticipate that ego development might be a potential moderator for the developmental processes of bicultural identity integration.

Hypotheses

In light of this literature, the objective of this study was to explore the role of personal maturity in the impact of bicultural identity integration strategies on the psychological well-being of Chinese-Canadian biculturals. The Washington University Sentence Completion Test (WUSCT; Hy & Loevinger, 1996), the Bicultural Identity Integration Scale (BIIS-2R; Huyhn & Benet-Martínez, 2010), and the Scales of Psychological Well-Being (SPWB; Ryff, 1985) were used in the research. The following hypotheses were proposed:

1. There will be a positive correlation between BIIS-2R scores and total SPWB score.
2. There will be a positive correlation between total WUSCT and total SPWB scores.
3. The relationship between BIIS-2R and SPWB will be moderated (buffered) by WUSCT.

Put simply, it was expected that personal maturity would serve as a buffer against the possible negative impact of bicultural integration strategies on levels of psychological well-being.

CHAPTER 3: METHOD

Of the three principal measures used in this study, versions of the BIIS and SPWB have been translated into Simplified Chinese and empirically validated in previous research (Chen et al., 2008; Li, 2014). The WUSCT has been translated into more than 11 languages, for both Western and non-Western, Confucian heritage cultures, and shown to be effective (Hy, 1998a). Previous empirical research has also established cultural equivalence for ego development as a construct to measure psychosocial maturity in a Chinese population (Liu, 2009; Liu, 2013; Liu & Yeh, 2011). The theory of ego development is being culturally adapted for Chinese populations, for example, in theories of the bicultural Chinese self (Yang, Liu, Chang & Wang, 2010). For this project, a published Chinese translation of WUSCT was not identified through literature review nor through contacting prominent researchers in the field. Thus, the present researcher translated Form 81 (the most recent revision for the WUSCT) into Simplified Chinese using adapted translation protocols (see Appendix I). This translation was reviewed and edited by two Chinese-English bilinguals, and then back-translated by a Chinese-English bilingual and reviewed by a native English speaker. Additional translation information is provided under each instrument description and Appendix I. Finally, the entire survey was pilot tested with two native English speakers and four Chinese-English bilinguals. Given that people from different Chinese diaspora backgrounds might prefer either Simplified or Traditional Chinese, the bilingual survey provided two versions, Simplified Chinese with English and Traditional Chinese with English.

Participants

Participants were all adult Canadians (aged 19 and above). All participants were biculturals by self-selection when they chose to participate in the study. Several criteria were

employed to clarify the bicultural status and background of participants. Participants who had lived at least five years in Canada and ten years in a Chinese speaking community were invited to join the study. Participants could have originated from, or resided in, any location in Canada. In addition, they could have come from any Chinese diaspora heritage. Finally, participants were asked to rate their perceived level of fluency in Chinese and English languages and their degree of comfort in Chinese and Western cultures.

In total, 246 people entered the bilingual online survey and 106 people completed the final portions of the survey, yielding a 43% completion rate. Out of these 106 people, two people were excluded due to large portions of missing data. Thus, the final sample consisted of 104 participants.

Recruitment. Participants were invited from community groups such as universities, churches, temples, and cultural associations across Canada (see Appendix E). A combination of word of mouth and online recruitment strategies was utilized. This project was titled *Bicultural Identity Research* and advertised with a welcome message (see Appendix A) in an online survey (www.fluidesurveys.com), including informed consent (see Appendix G), background questions (see Appendix B) and all questionnaires (see Appendix C, D, & E). Online recruitment strategies included Facebook, Craigslist, electronic mailing lists, and electronic flyers (see Appendix F) posted by people connected with community centers, churches, grocery stores and other cultural organizations. Contact people were asked to spread awareness of the project and to share links to the online survey with people who lived anywhere in Canada. Word of mouth recruitment involved asking individuals to participate, and asking them to spread the word about the project to others. An incentive was offered to all participants who provided their contact

information. Specifically, these participants were entered in a draw to win one of three \$50.00 gift certificates to T & T Supermarket.

Instruments

This project was designed to be fully bilingual and bicultural in research process as well as in analysis. Both Chinese and English were presented jointly for every item in all questionnaires. Because language is a key factor that primes cultural frames, the bilingual presentation format for questionnaires enhanced the bilingual environment offered to participants by the survey.

Background questionnaire. At the beginning of the online survey, all participants completed 17-items describing their background in several areas: personal, educational, occupational, cultural, linguistic, and family of origin (see Appendix B). The researcher translated these background questions into Chinese, and the translation equivalencies were reviewed and edited by two English-French bilinguals and three Chinese-English bilinguals. Additional details on translation procedures employed by the research team are described below.

Bicultural identity integration. The Bicultural Identity Integration Scale (BIIS-2R) was used to measure this variable. Developed by Huyhn and Benet-Martínez (2010), the BIIS-2R is a self-report inventory consisting of 20 items rated on a 5-point Likert scale where 1 = strongly disagree, and 5 = strongly agree (see Appendix C). The authors reported that the items yielded reliable scores across multiethnic groups, including “cultural harmony = .86, and cultural blendedness = .81” (p. 831). In their previous study, the authors also reported R^2 ranging between .31 and .36 (Huyhn, Howell, & Benet-Martínez, 2009). The researcher translated this 20-item questionnaire into Chinese and compared it with the translation by Chen et al. (2015) in their recent study of globalization responses of Hong Kong Chinese-English bilinguals. The two

translations had high consistency and Chen et al.'s translation was used given it was previously validated in their empirical research, reporting $\alpha = .76$. The present study yielded reliable scores consistent with the original authors: cultural harmony = .87, and cultural blendedness = .83.

Psychological well-being. Ryff's (1989) Scales of Psychological Well-being (SPWB) was used to measure the perceived psychological well-being of participants (see Appendix E). The SPWB is a self-report questionnaire consisting of six dimensions of positive psychological well-being: self-acceptance, personal growth, purpose in life, positive relations with others, environmental mastery, and autonomy (Ryff, 1989; Ryff & Keyes, 1995).

The present study used the 18-item short form (without any reverse items), which was adopted by several large-scale national surveys including the National Survey of Families and Households II (NSFH II), the National Survey of Midlife in the United States (MIDUS), the Wisconsin Longitudinal Study (WLS), and the Canadian Study of Health and Aging (CSHA) (Ryff & Keyes, 1995; Ryff et al., 2014). This version consisted of 3 items for each of the six subscales measuring the six dimensions concerning how the participants feel about life and about themselves. Each item was rated on a 6-point Likert scale ranging from 1 = strongly disagree to 6 = strongly agree. Total scores at 1.5 standard deviations above the mean are considered high level of well-being, whereas low well-being is indicated by scores that are 1.5 standard deviations below the mean. The present study used Li's (2014) adapted Chinese version of the 18-item SPWB for the Chinese translation. Results from his study "indicated that factor loadings were at least .60, and the reliability alpha coefficients were .92 and .60 – .75 for its six subscales" (p. 446). Results from the present study showed reliability alpha coefficient of .89 and .70 – .84 for its six subscales.

Ego development. Form 81 (most recent) of the Washington University Sentence Completion Test (WUSCT; Hy & Loevinger, 1996) was used to measure this variable (see Appendix D). The WUSCT contains a set of 36 sentence stems. Respondents were instructed to complete each stem using Chinese, English, or a mix of both languages. The items were then rated according to the scoring manual and tallied to yield the Total Protocol Rating (TPR). An impressive body of research, totalling more than 300 empirical studies have yielded strong psychometric studies of the WUSCT, including high levels of interrater reliability, high levels of internal consistency, and high test-retest reliability. Perfect interrater agreement per item averages about 85% and interrater agreement within one stage is often close to 95%. Cronbach alpha values are often reported to be .90 or higher, and test-retest correlations are often about .80 (Cohn & Westenberg, 2004). In a recent critical review, Manners and Durkin (2012) examined a range of studies pertaining to the construct, predictive and discriminant validity of ego development and the WUSCT. The authors concluded, “there is substantial empirical support for the conceptual soundness of ego development theory and the WUSCT” (p. 541). Results from this study indicated a reliability Chronbach alpha of .92, which is consistent with previous research.

The researcher of the present study contacted various authors who have done studies using the WUSCT, including Hy, co-author with Loevinger on the scoring manual (1996), to request a copy of Chinese translated version of this questionnaire. None was received and a published copy could not be found through further literature review. Therefore, this researcher took on the task of translating Form 81 consisting of all 36 sentence stems. The researcher attempted to adhere to Hy’s (1998a) translation instructions while also living within time and resource constraints. For this study, prior to the translation process, the researcher familiarized

herself with the instrument through reading and re-reading of the sentence stems, the scoring instructions, and the general history and other technical details. In addition, the researcher completed all sentence stems to gain necessarily perspective as a respondent. Then, the researcher practiced scoring through the training manual to gain familiarity with the scoring protocol.

Given the difficulty of recruiting translators who satisfied the requirement of both English and Chinese fluency for the translation of WUSCT, the researcher was not able to give it to two other Chinese-English bilinguals to translate (Hy, 1998a, p. 124). Instead, the researcher translated all 36 sentence stems into Simplified-Chinese and employed a reviewing and pilot testing protocol. First, given that the WUSCT is particularly sensitive to language, such as differences in meaning across different sentence structures, and are expected to be lost in translation (p. 123), the draft translation was reviewed through a discussion process with an Anglo-English speaker who was already trained in using the WUSCT to obtain the most accurate dynamic translation that represented the original English stems. Second, the edited translation was given to an independent Anglo-English-Chinese bilingual speaker who was not trained in WUSCT but was familiar with both English and Chinese cultures to provide feedback. Once this feedback was incorporated, the revised translation was given to two Chinese-English bilingual biculturals for review. The edited version incorporating their feedback was then back-translated into English to compare with the original for consistency. The final edited and back-translated version was then pilot-tested with two Anglo-English speakers and four Chinese-English speaking biculturals. The feedback and suggestions from pilot testing were incorporated and finalized as the deployed translation version with both Simplified and Traditional versions of Chinese.

Procedure

The research design was submitted to the Trinity Western University Research Ethics Board (REB) and was approved. The bilingual features of the questionnaire design were approved as providing the opportunity for bilingual participants to choose their language of response.

Participants were welcomed by the opening page of the online survey and assured that their answers will be kept confidential (see Appendix A). A simple instruction was provided to allow participants to select either Simplified or Traditional versions of questionnaire; either choice was accompanied by English translation. An informed consent form followed (see Appendix G), outlining pertinent information to the project and how to withdraw from the study should the participants choose to do so. It was stated that participants did not need to enter any identifying information for participating or completing the survey. In addition, for those who chose to enter the draw, all of their names and contact information were kept separate from the survey results. Participants were instructed to read the informed consent form before they begin the online survey. If they chose to participate in the study, they were asked to give their consent by clicking "Next" in order to enter the online questionnaires. Those who chose not to participate in the study were instructed that they could close the internet browser window at any time.

The online survey required the participants to complete a demographic questionnaire before moving through to the three instruments (see Appendix B, C, D, & E). The survey took an average of about 60 minutes to complete. In order to manage possible order-effects, the questionnaires were administered in the following sequence: (1) the WUSCT, (2) the BIIS-2R, and (3) the SPWB. This order strategy served the pre-emptive function of minimizing our

anticipated order-effect. Specifically, we anticipated that the most sensitive instrument to order-effect is likely the WUSCT, such that priming individuals with questions from either the BIIS-2 or the SPWB may influence the way they respond to the WUSCT's sentence stems. Thus, we administered the WUSCT first. Following the WUSCT, the BIIS-2R was likely more sensitive than the SPWB to order-effect, thus, we administered the BIIS-2R second and the SPWB last.

At the end of each scale, participants were invited to provide idiographic comments on specific items and/or on the questionnaire as a whole. The invitation included requests for additional descriptions on language fluency, cultural, ancestral and racial background, and anecdotal comments. After all the questionnaires were filled out, respondents were invited to make comments about the survey as a whole. These comments are used during data analysis to offer insights and context to the moderation analysis.

Finally, a closing page expressed gratitude for their participation (see Appendix H) and included a contact form in the event that individuals wished to be notified of this study's results.

Missing data. Out of a total of 246 people who entered the welcome page, all respondents who closed the survey before completing it were removed from the data set. This procedure removed 140 people. For the WUSCT questionnaire (Hy & Loevinger, 1996), participants who did not fill out any of the items were removed from the analysis. Two participants were affected by this procedure, resulting in the final sample size consisting of 104 participants ($N = 104$). If participants missed three or less of the 36 items, the mean conformist score (4.5) was substituted for each missing item as a conservative substitution. This procedure affected seven participants. Finally, if participants missed more than three out of 36 items but still completed a total of more than 18 items, the mean score from their total completed item scores was calculated then compared to the mean range of TPR manual scores to derive their

final TPR score. This procedure reflects the use of 18 items as an alternate form for the WUSCT and followed the ogive rules for 18-item tests to derive the TPR score (Hy, Bobbit, & Loevinger, 1998, p. 27) and affected three participants. There was no missing data on the BIIS-2R or the SPWB for the 104 participants.

CHAPTER 4: RESULTS

Descriptive Analyses

The final sample of Chinese-Canadian biculturals included 36 males (35%) and 68 females (65%). Their age distribution ranged from 20 to 64 years with 44% of the sample between 20-34 years old, 19% between 35-44 years old, and 37% between 45-64 years old. 59% indicated they were married or in a common law partnership, 40% were single, never married, and the remainder divorced (1%). In this sample, gender is correlated with Ego Development (ED): females have higher ED, $r = .20, p = .041$. Age is positively correlated with BII-Harmony and Psychological Well-Being (PWB, using Spearman's rho), respectively $\rho = .23, p = .011$; $\rho = .36, p < .001$. A range of educational backgrounds was reported within this sample: 43% indicated completion of a Bachelor's degrees, 26% had Master's degree, 10% had some college credit but no degree, 9% received a doctorate degree, and the remainder 11% who graduated high school and obtained some college credits.

In relation to their cultural backgrounds, 99% of the participants indicated that they were Chinese and 87% indicated that they have multiple ethnic backgrounds. 70% of the participants indicated they were born in the People's Republic of China, 15% in Hong Kong, 8% in Taiwan, 6% in Canada, and only one respondent each was born in Vietnam and Malaysia. Of those that completed the survey, 84% indicated they have lived in Canada for five or more years and 16% for less than 5 years but felt comfortable with Western culture. 90% indicated they have lived in a Chinese-speaking community for 10 or more years and 10% for less than 10 years but felt quite comfortable with Chinese culture. Western comfort positively correlated with BII-Harmony: $r = .30, p = .002$, BII-Blendedness: $r = .44, p < .001$, and PWB: $r = .35, p < .001$. Chinese comfort did not significantly correlate with any of the key variables. Years in Canada positively

correlated with Western Comfort: $\rho = .36, p < .001$ and BI-Blendedness: $r = .22, p = .024$. Years in China did not significantly correlate with any key variables.

In addition, patterns of self-reported confidence in Chinese and English speaking, listening, reading, and writing were examined (S, L, R, W, respectively). Specifically, confidence in Chinese language proficiency positively correlated with BII-Harmony & Conflict (S: .18, L: .25*, R: .23*, W: .23*; $* = p \leq .022$). Confidence in English language proficiency positively correlated with BII Blendedness & Compartmentalization (S: .35**, L: .30**, R: .26**, W: .26**; $** = p \leq .009$). English language confidence also positively correlated with PWB (S: .24*, L: .22*, R: .18, W: .31*, $* = p \leq .027$). Chinese writing confidence is negatively correlated with ED (W: -.20*, $p = .040$). The patterns of these categories demonstrated that there is a variety of language proficiency (confidence) and preference of our Chinese-Canadian bicultural participants when responding within the bilingual environment provided by the researcher. These patterns lend support to the bilingual survey design of this project as it more accurately captures the diverse bilingual fluencies and comfort levels within the bicultural Chinese-Canadian community. Therefore, these findings suggest that bilingual research in questionnaires can help us engage with more nuanced insights and contexts when conducting bicultural studies (Barker, 2015).

Descriptive statistics for the key study variables are presented in Table 2. Skewness and kurtosis in the key study variables failed to fall outside of 95% confidence intervals, suggesting that normality of distributions was sufficient for parametric analysis. Prior to hypothesis testing, the regression assumptions of linearity, homoscedasticity, and normality (Cohen, Cohen, West, & Aiken, 2013; Field, 2013) were first examined. Results indicated that the assumption of linearity or residual homoscedasticity has been met. In addition, examination of outlier

scatterplots revealed bivariate even distribution. These results supported the use of regression analysis with this data set.

Hypotheses

The first hypothesis posited a positive correlation between Bicultural Identity Integration (BIIS) scores and the Scales of Psychological Well-Being (SPWB) score. As shown in Table 2, this hypothesis was supported for both blendedness-compartmentalization (BII-BC) and harmony-conflict dimensions (BII-HC) of BIIS: $r_{BC}(102) = .37$; $r_{HC}(102) = .38$, $p < .001$, one-tailed. As anticipated, when individuals chose blending or harmonizing bicultural integration strategies, their self-reported well-being tended to be higher. These correlations reflect a moderate-strong effect size for each BII dimension: $r^2_{BC} = 14\%$ and $r^2_{HC} = 14\%$.

In the second hypothesis, a positive correlation was anticipated between total ego development (WUSCT) score and total SPWB score. Results in Table 2 supported this hypothesis: $r(102) = .26$, $p = .004$, one-tailed. This was a medium effect size ($r^2 = 7\%$). In this relationship, individuals with higher levels of maturity tended to report higher levels of well-being.

Hypothesis three posited a moderation effect. A linear hierarchical regression analysis was conducted to test for whether WUSCT moderates the relationship between bicultural integration strategies (BIIS) and the psychological well-being (SPWB) of Chinese-Canadian biculturals. To be certain of avoiding potential problems generated by multicollinearity with the interaction term, Aiken and West (1991) recommend centering all continuous variables for moderation analysis. In this model, both subscales of the BII (HC and BC) were used in this analysis since these subscales are conceptually independent (Huynh & Benet- Martínez, 2010).

Table 2

Correlations, Means and Standard Deviations of Key Study Variables

	1	2	3	4
1. BIIS: B & C	--			
2. BIIS: H & C	.52**	--		
3. WUSCT	.07	.08	--	
4. SPWB	.37**	.38**	.26**	--
<i>M</i>	3.75	3.58	5.49	4.95
<i>SD</i>	.69	.68	.98	.61

Note. ** Correlation is significant at the 0.01 level. BIIS: B & C = Bicultural Identity Integration: Blendedness & Compartmentalization; BIIS: H & C = Bicultural Identity Integration: Harmony & Conflict. Scores range from 1.0 – 5.0; WUSCT = Washington University Sentence Completion Test. Scores range from 3.0 – 9.0; SPWB = Scales of Psychological Well-Being. Scores range from 1.0 – 6.0.

Results indicated that the main effects for bicultural identity integration and ego development along with moderation effects for both subscales of BII statistically significantly predicted psychological well-being, $F(3, 100) = 10.22, p < .001$, and cumulatively explained 23% of the variance in psychological well-being, $R^2 = .23$. The test for the moderation effect yielded a small, non-significant effect, $\Delta F(2, 98) = 1.77, p = .175, \Delta R^2 = .027$. So the overall analysis examining the whole BIIS-2R failed to achieve statistical significance in this sample, which is too small to provide adequate power for this test, $1 - \beta = 0.30$. A statistically non-significant moderation effect with low power for the test and a substantively worthwhile effect size warrant further clarification given the relatively little empirical research currently available in this domain.

To follow-up and clarify the moderation analysis, we examined the relative contributions of each of the BII subscales to the moderation. Beta weights showed that the BII-BC subscale was responsible for the moderation effect. Thus, the moderation analysis was repeated with the BII-BC alone (see Table 3). The follow-up regression revealed a trend for the interaction term: $\Delta F(1, 100) = 3.82, p = .053$ and explained 3% of the variance in well-being, $\Delta R^2 = .03, 1 - \beta = 0.32$ (see Table 4). Given that this effect size falls within the typical 1% - 3% effect size arising for interaction terms in social science research (Chaplin, 1991), it is worth exploration. This pattern suggests that there may be a moderation effect worth examining for the BII-BC. To further explore the possible theoretical import of this pattern, the interaction was graphed (see Figure 1). Low scores in BII-BC reflect compartmentalizing tendencies in bicultural identity integration strategies. However, participants using compartmentalizing strategies who scored high in ego development actually also reported high levels of well-being. In other words, it is possible that personal maturity has a buffering effect on the negative impact that

compartmentalizing bicultural identity strategies have on overall psychological well-being for Chinese-Canadians in our sample.

Table 3

Hierarchical Multiple Regression Analyses Predicting Psychological Well-Being From Bicultural Identity Integration-Blendedness & Compartmentalization, Harmony & Conflict, and Ego Development

Step	R^2	ΔR^2	$\Delta F (df_1, df_2)$	p
1	.184	.184	11.41 (2, 101)	.000
2	.235	.050	6.59 (1, 100)	.012
3	.261	.027	3.47 (2, 98)	.065

Note. $N = 104$

Table 4

Follow-up Multiple Regression Analyses Predicting Psychological Well-Being from Bicultural Identity Integration-Blendedness & Compartmentalization Only and Ego Development

Step	R^2	ΔR^2	$\Delta F (df_1, df_2)$	p
1	.133	.133	15.71 (1, 102)	.000
2	.189	.056	6.96 (1, 101)	.010
3	.219	.030	3.82 (1, 100)	.053

Note. $N = 104$

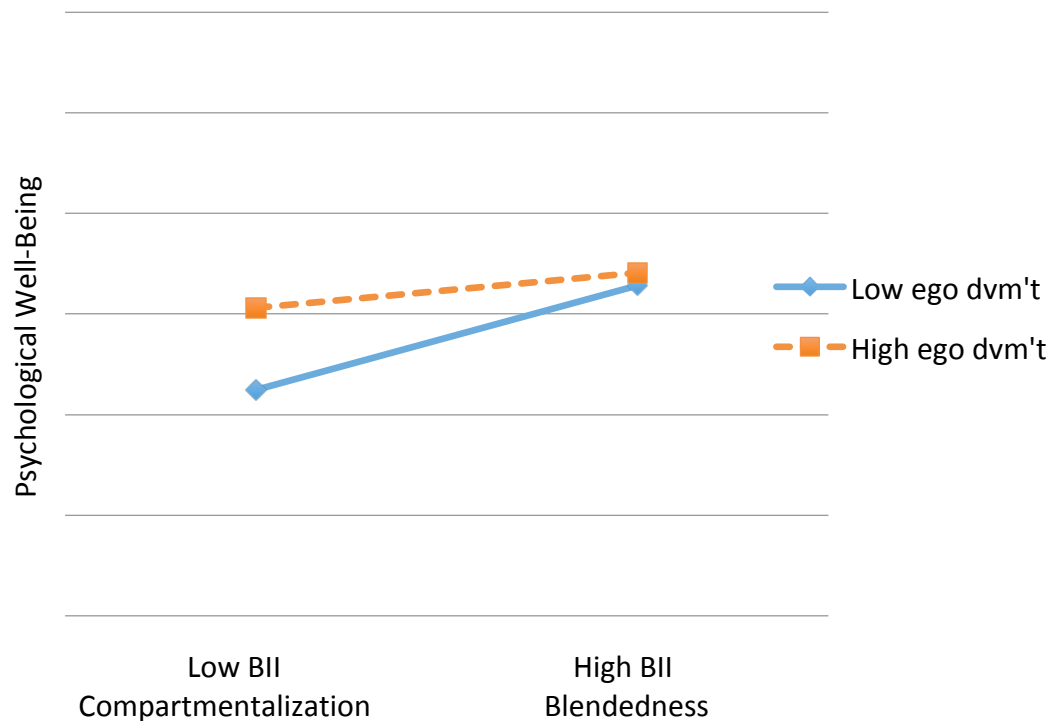


Figure 1. Moderation trend showing the ego development buffering effect. This graph illustrates the trend, $p = .053$, $\Delta R^2 = .03$, shown in the BII Blendedness & Compartmentalization x Ego Development interaction when predicting psychological well-being in this group of Chinese-Canadian biculturals. The graphing macro used for this figure is available from “Interpreting Interaction Effects,” by J. F. Dawson (2016). Retrieved from www.jeremydawson.co.uk/slopes.htm

CHAPTER 5: DISCUSSION

This study examined the relationship between Bicultural Identity Integration (BII) and Psychological Well-Being (PWB) focusing on the possibility of Ego Development (WUSCT) moderating the relationship between BII and PWB. First, based on previous research, we know that bicultural processes can help biculturals live life more fully. Second, we know that our maturity processes provide us ways to integrate and to make sense of our experiences, thus also helping us to live our lives more fully. Therefore, it is reasonable to imagine that there may be some form of interesting interconnection between bicultural processes and our maturity development that may together contribute to biculturals living better lives. For instance, we know that psychosocial maturity shapes how we view the world, education, and how we grow older. More importantly, it shapes how biculturals understand the experience of living between two cultures. So, it is plausible that maturity processes also could help lessen the degree of conflict biculturals may feel when navigating and negotiating between two cultures. Understanding this possibility extends our understanding of biculturalism and bicultural identity development by way of explicitly looking at the role personal maturity development plays for those living between two cultures.

In addition, Barker (2015) argues that “acculturation outcomes are neither uniform nor easily predictable”, revealing that different biculturals choose different acculturation strategies within different contexts (p. 68). These choices allow biculturals to blend “components from both home and host cultures” to “coalesce into a complex, integrated mosaic” (p. 67). Given these complexities and the unpredictability of the highly selective bicultural processes, this study’s bilingual mode of engagement was intentionally designed to provide the rich environment required for participants to fully express their unique bicultural identities. Indeed,

our participants chose to utilize different languages, at different times and in different combinations.

The first hypothesis predicted a positive correlation between BII and PWB. This expectation was supported, $r^2_{BC} = 14\%$ and $r^2_{HC} = 14\%$, suggesting that individuals with high bicultural integration strategies in each harmony and blendedness dimensions also reported higher levels of psychological well-being. These results supporting the positive correlation between bicultural identity integration strategies and psychological well-being is consistent with existing biculturalism research. For instance, Huynh (2009) found positive association between cultural harmony and well-being, which is consistent with the findings of this project where higher levels of cultural harmony was associated with greater psychology well-being reported by our Chinese-Canadian participants. Moreover, Chen et al. (2012) provided additional awareness in looking at how people from different Chinese backgrounds may experience the relationship between BII and psychological adjustment. They reported consistent results across five studies indicating psychological adjustment was positively correlated to BII whether their participants were from Hong Kong, Mainland China, or the Philippines. The findings of this project thus fit well with previous research, revealing that the positive relationship between BII and psychological well-being seems to be a shared experience by biculturals from a variety of Chinese diaspora heritages.

The second hypothesis predicted a positive correlation between total ego development (WUSCT) score and total psychological well-being (SPWB) score. This anticipation was also supported by the results, $r^2 = 7\%$, indicating that when one has higher level of maturity, one's sense of well-being also seems to increase. Lambie, Smith, and Ieva (2009) studied ego development levels, wellness, and psychological disturbance of counseling graduate students.

Their results reported similar findings, showing statistically significant relationships between ego development and subjective wellness, $r = .23$.

This project's finding of a 3% linear relationship shows modest connections shared by a substantial proportion of participants and encourages further examination of ways ego development and bicultural identity might shape one another.

Hypothesis three posited that ego development (WUSCT) would have a moderating effect on the relationship between bicultural integration strategies (BIIS) and the psychological well-being (SPWB) of Chinese-Canadian biculturals. In a global moderation analysis, the moderation relationship of BII and PWB by ED emerged as non-significant, $\Delta R^2 = .03$. Since the subscales of BII are being treated independently in recent BII research, their potential for differential roles in moderation was examined. This follow-up analysis showed a clear 3% trend for moderation of the Blendedness & Compartmentalization (BII-BC) subscale by ego development, $p = .053$. This low power of these interaction tests and substantive relevance of 3% effect size (Chaplin, 1991) highlights the importance of considering these results as promising for the purposes of guiding further research. Conceptually, the observed pattern of interaction may invite consideration of ways that levels of personal maturity could buffer negative impact of compartmentalizing bicultural integration strategy on the psychological well-being of Chinese-Canadian biculturals. In addition to inviting future quantitative investigation for possible replication and clarification of similar patterns, modest effects also hint at a range of variations of such patterns.

As stated earlier in the discussion of research procedures, we provided opportunities for participants to offer comments with the intent to gather additional contextual information about their bicultural processes. Here, to further illustrate and to clarify possible buffering effects, we

selected four comments from different Chinese-Canadian bicultural participants in this project. For instance, one individual who tended to use the blending bicultural integration strategy expressed, "It's hard to describe, but I feel that I am both Chinese and Canadian. It's not simply a blend of the two, but more like two pieces of paper overlaying on top of each other with light shining through it, and that's what people see." Similarly another bicultural individual also using the blending strategy shared, "I feel like my stance is very strong on feeling at peace with my background. I have never really felt a dissonance between my two different sides simply because I have grown up like this, and I enjoy my status as being a Chinese Canadian." These two salient statements are reminiscent of previous biculturalism research on Chinese-Americans, where Huynh et al. (2011) found that participants who scored higher in cultural blendedness identified more with phrases such as "I am a Chinese-American" (p. 830). In both previous research and the current project, these types of statement patterns suggest that those biculturals using the blending strategy seem to feel less tension, and are more at ease, accepting, or even enjoying their status as biculturals.

Conversely, Huynh et al. reported that participants who used more of the compartmentalization strategy tended to use phrases such as "I see myself as a Chinese in the United States" (p. 830). In this project, we also found similar patterns in our Chinese-Canadian participants who chose the compartmentalizing strategies. One such individual wrote, "I am confused where I stand." Another added, "Being in two cultural backgrounds, sometimes I really feel I don't know where I am." These statements provide clear evidence of the conflicts experienced by biculturals who tend to compartmentalize their two cultural frames.

Interestingly, based on the above comments and patterns, one may assume that the two participants in this study who chose the compartmentalizing strategy may have reported lower

levels of psychological well-being than their blending counterparts. However, our results showed that all four participants scored equally high in their perceived psychological well-being. The key ingredient at play seems to point to ego development. Upon examination, all four participants scored at post-conventional level of ego development (E5 and above). These simple illustrations complement the group-based trend analysis in elucidating how personal maturity may buffer negative impacts that compartmentalizing strategies may have on psychological well-being for some Chinese-Canadians.

This could mean that at least within our Chinese-Canadian bicultural sample, the compartmentalizing biculturals who have higher levels of personal maturity are able to negotiate and/or make meaning of the conflicts inherent within their integration strategy in such a way that does not impact their sense of well-being. This suggestion is supported by Bauer and McAdams (2004), who observed that the “levels of ego development mark important distinctions in the ways, and degrees of complexity with which individuals understand the self, others, and social situations” (p. 115).

Moreover, our rationale for using a fully bilingual questionnaire design was also supported by our results. Specifically, out of a total of 104 completed responses, 61 were in English only, 26 in Chinese only, and 17 in some combination of bilingual Chinese-English. There were also clear indications that participants actively engaged with the bilingual questionnaire either through reading, responding, or commenting on its bilingual design. For instance, a Chinese responder commented about a specific Chinese word used in the translation of BIIS-2R question. In another instance, an English responder commented on the match between the meanings conveyed by the overall Chinese and the English translations. Lastly, a bilingual responder provided a fully bilingual comment with a translation suggestion for one of

the WUSCT sentence stems. These specific examples illustrate contextually our bicultural participants' active engagement within the bilingual questionnaire environment that would have otherwise not surfaced in a monolingual design.

Previous research tends to presume that cultural frames are deployed in stable fashions. Recent research (Barker, 2015) has revealed that many biculturals deploy cultural frames in dynamic manners with varying degrees of connection, tension, and blending. Aspects of these contextual dynamic sensitivities are beginning to emerge from the follow-up analysis. The trend toward a buffering effect of ego development suggests well-being association with bicultural identity may be primarily a factor for those people with more conventional ego development orientations. The association between ego development and well-being could be more relevant for those with compartmentalizing bicultural identity strategies. However, further conceptual and empirical research is required to substantiate and validate this trend.

In sum, there are four important aspects of this study. First, this study provides evidential support that a fully bilingual design is advantageous in providing a rich environment needed for the complex, unpredictable, and asymmetrical bicultural processes to fully emerge. Second, these results overall confirm the significant role that bicultural identity integration plays on the perceived psychological well-being of Chinese-Canadian biculturals. Individuals who are high in BII scores (either using harmonizing or blending strategies) also tended to report higher levels of psychological well-being, affirming the strong positive association and predictive power of BII on PWB. On the other hand, as shown by previous research and this project's findings, individuals who choose compartmentalizing or conflicting bicultural identity integration strategies tend to lead to experiences of conflicts, tension, and negative psychological adjustments, resulting in lower perceived levels of psychological well-being (Huynh, 2009;

Huynh et al., 2011). In addition, the results also showed personal maturity has a medium strong relationship with well-being, suggesting that it could be an important factor influencing the perceived psychological well-being of Chinese-Canadian biculturals. Finally, based on the follow-up trend toward finding an interaction effect, our data suggests the possibility that higher levels of personal maturity may serve as a protector against the negative impacts of compartmentalizing or conflicting bicultural identity integration strategies on the psychological well-being of some Chinese-Canadian biculturals.

Significance and Implications for Counselling Psychology

There has been increasing research in the field of biculturalism in the United States. However, there are few Canadian studies. This study has contributed to the advancement of knowledge in the area of bicultural identity and psychological well-being in the Canadian context and adds to a more global understanding. Specifically, the results of the study provide strong support that identity integration plays a significant role in the interactions between a Chinese-Canadian bicultural individual's first-culture and second-culture learning processes. Moreover, few works have linked the relationship between bicultural identity processes, well-being, and personal maturity. This study expands our understanding of the multidimensional relationships involved through the empirical examination of the roles personal maturity and bicultural identity play in shaping the psychological well-being of Chinese-Canadian biculturals.

This study will strengthen the professional practices of counselling psychology particularly when working with bicultural individuals to help them flourish with dual cultural identities. The results of the study confirms previous biculturalism research in informing counsellors of how a bicultural individual's chosen integration strategy may influence his or her perceived well-being. In addition, the buffering trend suggests that a bicultural client's

psychosocial maturity may impact (negatively or positively) his or her identity development. The research shows that all three factors should be considered in order to provide a more holistic view of bicultural clients. For example, if increasing a bicultural client's sense of well-being is the therapeutic goal, a counsellor who is informed by our research results will understand that there are various pathways to achieve this goal. Putting all three factors together, it can be speculated that strong well-being can be obtained by either (a) helping the client become more flexible in viewing the different cultures while maintaining a compartmentalizing bicultural integration strategy, or (b) by facilitating the client's integration strategy to shift from compartmentalizing to more blending of the two cultures. Put differently, one pathway adopts a different way of bicultural integration while the other pathway adopts a more flexible personal framework where blending is not required. The key application here distills to the word "flexibility," both in terms of flexibility in a counsellor's bicultural case conceptualization and therapeutic interventions designed to increase flexibility in a client's integration strategies and/or framework for viewing the world and self.

In addition, the counsellor could prioritize therapy to incorporate exploration of cultural switching and integration strategies, particularly around topics on power, privilege, oppression, control, and social justice. For instance, it is widely acknowledged that biculturals regularly encounter pressures from mainstream Canadian culture to integrate in some conventionally acceptable fashion. On the other hand, what is sometimes overlooked is pressures from these biculturals' cultures of origin. The findings of this project suggest that when faced with these bi-directional pressures, our bicultural participants demonstrated their unique ability to merge, overlay, and find their footing in the spaces "in-between." A salient example from the ego development scoring processes showed that our Chinese-Canadian biculturals were neither

entirely individualist nor entirely collectivist in their ways of thinking. Rather, they embraced a blend of both individualism and collectivism. Thus, therapeutic explorations on power and social justice need to embrace similar bicultural stances to help accurately promote flourishing through these unique bicultural experiences and their distinctive ways of life.

Moreover, within the counselling psychology field, it is commonly understood that Chinese clients often tend to somaticize their psychological distress (Prochaska & Norcross, 2014). Having a more nuanced understanding of the internal conflicts and possible compartmentalization between cultures could inform the counsellors during case-conceptualization, especially in recognizing the interactive effect of clients' internal meaning making of their experiences and their psychological, emotional, and physical symptoms.

Limitations and Future Research

It is important to acknowledge the limitations given the nature of the complexities of the phenomenon under study. First, while the recruitment design is inclusive to many Chinese diaspora heritages, the design specified the study for Chinese-Canadians. The issue here is that the construct of BII operates according to certain traditions of cross-cultural research, which tends to reify culture in terms of national boundaries. However, there is not enough evidence to say such national boundary is necessarily adequate in distinguishing the behaviours and experiences of its people. Therefore, the use of national boundaries as a distinguishing factor of participant inclusion criteria is a major limitation. Furthermore, this study did not consider other mixes of biculturalism, such as Chinese-American, Chinese-Australians, Chinese-Europeans, and so forth. Nevertheless, the hope is that this study will contribute to future research within the study program of biculturalism and be extended to broaden cultural diversity. In addition, the relatively small sample size ($N = 104$) may have masked small but significant moderating effects

of ego development on the relationship between bicultural identity integration and psychological well-being. A larger sample size consisting of participants from more diverse cultural, socioeconomic, and age backgrounds may be helpful in enhancing sensitivity to possible moderating effects and their variations.

A second limitation concerns the inter-rater reliability of the ego development (WUSCT) scoring process in the present study. The technical manual (Hy, 1998b) indicates that ideally two independent raters should score, record and compare the item ratings. For the current project, the researcher recruited a research team consisting of two Chinese-Canadian bilinguals and two Anglo-Canadians who were familiar with French. The researcher, being a Chinese-Canadian bicultural, is also fluent and confident in both written and spoken English and Chinese and acted as primary translator. The rationale was to have scorers fluent in both Chinese and English in anticipation that the participants could use either Chinese or English to respond to the bilingual questionnaires. The training manual indicated that between 28 – 42 hours may be required for basic mastery of the ego development scoring protocol. Given the bilingual nature of the current project, it was anticipated that training could take longer. After approximately 50 hours of training time, the two Chinese-Canadian bilingual trainees withdrew from the project prior to the scoring phase for participant protocols. The training phase for the WUSCT scoring conducted cultural reviews for the scoring manual and participant protocols. In addition, the core research team met regularly and debriefed scoring of subsets of English response protocols, Chinese response protocols, and combined language protocols. Scores from 22 participant protocols were compared and reached agreement. This indicates that a satisfactory and substantial level of training and scoring competency was achieved in the research team, as well

as establishing requirement for further strengthening of future bilingual research in ego development.

In addition to the English scoring consensus developed by the core research team, regular meetings were conducted between the primary researcher and the Anglo-English research team member who was experienced in ego development scoring and research. Together, we employed a systematic cultural review protocol to examine translation gaps between Chinese and English, social and linguistic conventions, and connections between participant backgrounds and WUSCT responses. Comments by participants about WUSCT items were also reviewed, providing insight into individual and group response patterns. Finally, the majority of WUSCT protocols were reviewed thematically to inform theory-based scoring of categories and levels for specific items. The processes of team-based debriefing of scoring during training and during scoring of participant protocols contributed to convergence and stabilization of scoring by the primary scorer. These systematic cultural review and debriefing processes provided a coherent conceptual clarification for applying ego development theory to this group of Chinese-Canadians (see also Appendix I).

The third limitation concerns language and translation principles inherent in multilingual research studies. Methodological research comparing and contrasting conventional back-translation protocols with the kind of dynamic cultural review strategies employed in the present study need to be conducted. It is reasonable to anticipate complementary strengths and weaknesses could emerge from such methodological research.

Clearly the implications of the follow-up trend analysis warrant further research. To more thoroughly examine the topic of personal maturity, bicultural identity integration, and psychological well-being, three things could be done. First, the sample size could be expanded

to at least 150 participants. Second, a more systematic sampling strategy can be employed to obtain participants from a greater range of cultural, socioeconomic, and age backgrounds. For instance, in cultural terms, additional representatives from Singapore, Philippines, Indonesia, and other Chinese diaspora heritages may be helpful in elucidating differences that were not apparent in this project. Similarly, a high portion of participants in the project was recruited from Christian churches and universities. Thus, broadening faith, education, and other socioeconomic backgrounds may be helpful in capturing more diverse representatives of biculturals. Third, following a stricter team-based ego development scoring protocol would achieve a higher inter-rater reliability. Finally, in light of Barker's research, tremendous intricate details in multiple negotiations are present in the analysis of bicultural identity, it warrants future research of all dimensions of bicultural identity integration.

This project, like other research in this field, offers limited quantitative information about global biculturalism experiences. The literature review has already highlighted the complexities of bicultural experiences. Given the inherent gaps and limitations of using only quantitative or qualitative designs, utilizing a concurrent mixed methods design strategy in the future could prove its utility in broadening and deepening the current empirical understanding of bicultural identity processes. Based on this project, the researcher has noted that Loevinger's ego development instrument lends itself to a possible qualitative analysis of the sentence completion data. For instance, some participants chose to complete the sentence stems in English only, some in Chinese only, and some in both English and Chinese. The significance of these response patterns could be investigated to add to our understanding of bicultural identity development. Similarly, the response patterns of participant comments can be further explored through narrative analysis.

Moreover, a deeper narrative analysis incorporating interviews could serve as a great addition in providing more nuanced stories of bicultural lives. Moreover, incorporating back-and-forth “conversations” between the two modes of understandings narrative (Bruner, 1986) and moderation may generate complementary insights to the broader human experiences of biculturalism. On the one hand, the quantitative understanding from this project has allowed us to see some large-scale patterns of all participants. Future study could select interview participants based on the quantitative patterns. The future narrative understanding may speak into both the rich details and the intricate ways of the emergence of the quantitative patterns. For example, a bicultural participant whose BIIS-2 score indicates a compartmentalization integration strategy—typically associated with having “lower openness to new experiences, greater language barriers, and living in more culturally isolated surroundings” (Huynh et al., 2011, p. 830)—may in fact qualify his or her chosen strategy as one that is most appropriate for his or her subculture. Through this story, we may learn that he or she has heritage rooted in a historical Chinatown enclave where her parents and grandparents prefer to stay within their own groups and only speak a particular Chinese dialect. For such an individual, compartmentalization may in fact be the most effective strategy in maintaining his or her family expectations and cultures while still being able to enter into mainstream culture.

Finally, the results of this study have brought important human development knowledge to our understanding of Chinese-Canadian bicultural dimensions of human flourishing. In Canada, we are welcoming increasing numbers of bicultural communities. It is hoped that this project will stimulate future research to continue learning about Chinese biculturals and extend beyond to other ethnic biculturals who have made Canada their home.

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APPENDIX A: Welcome Script

☒ 简体中文
☐ 繁體中文

Welcome to the Bicultural Identity research project!

Thank you for taking part in this project survey designed to learn about the bicultural experiences of Chinese-Canadians living in Canada. This survey should take 30-60 minutes to complete. Please be assured that all answers you provide will be kept strictly confidential. You can select your desired Chinese translation from the drop down menu at the top of the page.

欢迎您!

首先很感谢您参与此次问卷调查。本次问卷的目的为了更全面地了解生活在加拿大的华人的文化经历和体验。本问卷采取匿名填写方式，问卷结果只用于论文研究，所以您可以放心回答。请您按实际情况作答，否则将有可能影响调查结果的准确性。再次谢谢您的参与。请在右上方选择简体或繁体中文译本回答。

NEXT 下一页

Discard

APPENDIX B: Background Questionnaire

Please describe some of your personal background. 个人信息。

1) What is your gender? 您的性别?

- ☐ Male 男
- ☐ Female 女
- ☐ Other 其他 _____

2) Please check the appropriate box that describes your age 您的年龄?

- ☐ Under 20 years old (20 岁以下)
- ☐ 20-34 years old (20-34 岁)
- ☐ 35-44 years old (35-44 岁)
- ☐ 45-54 years old (45-54 岁)
- ☐ 55-64 years old (55-64 岁)
- ☐ 65-74 years old (65-74 岁)
- ☐ 75 years or older (75 岁以上)

3) Education background: What is the highest degree or level of school you have completed? 教育背景: 您完成的最高学历是什么?

- ☐ No schooling completed 无正式教育
- ☐ Kindergarten to 8th grade 幼儿园- 初中
- ☐ Some high school, no diploma 高中肄业
- ☐ High school graduate, diploma or the equivalent (for example: GED) 高中毕业
- ☐ Some college credit, no degree 大专
- ☐ Trade, technical, or vocational training 职业学校
- ☐ Bachelor's degree 本科 大学毕业, 学士学位
- ☐ Master's degree 硕士学位
- ☐ Doctorate degree 博士学位

4) Marital Status: What is your current marital status? 您的婚姻状况?

- ☐ Single, never married 未婚

- ☐ Married or common law partnership 已婚/同居
- ☐ Widowed 丧偶
- ☐ Divorced 离异
- ☐ Separated 分居

5) Employment Status? 您的就业状况?

- ☐ Employed for wages 在职
- ☐ Self-employed 自雇
- ☐ Out of work and looking for work 暂时不工作, 正在找工作
- ☐ Out of work but not currently looking for work 不工作, 不在找工作
- ☐ A homemaker 家庭主妇
- ☐ A student 学生
- ☐ Military 军人
- ☐ Retired 退休
- ☐ Unable to work 无法工作

6) Please rate your level of fluency in Chinese in the areas of speaking, listening, reading, and writing. Please select a rating from 1 to 5, where 1 = Extremely not confident, 5 = Extremely Confident 请选择您的中文流利程度, 包括会话, 听力, 阅读, 和写作。

1 = 没有自信, 5 = 非常自信

- | | | | | | |
|--------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 | 2 | 3 | 4 | 5 |
| Speaking 会话 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Listening 听力 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Reading 阅读 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Writing 写作 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

7) Please rate your level of fluency in English in the areas of speaking, listening, reading, and writing. Please select a rating from 1 to 5, where 1 = Extremely not confident, 5 = Extremely Confident 请选择您的英语流利程度, 包括会话, 听力, 阅读, 和写作。

1 = 没有自信, 5 = 非常自信

- | | | | | | |
|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 | 2 | 3 | 4 | 5 |
| Speaking 会话 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Listening 听力 ○ ○ ○ ○ ○

Reading 阅读 ○ ○ ○ ○ ○

Writing 写作 ○ ○ ○ ○ ○

8) Please feel free to describe your fluency in any other languages that you consider important (and feel free to use the same ratings):

请描述您认为重要的其他任何语言的流利度:

9) People living in Canada come from many different cultural, ancestral and racial backgrounds.

Which backgrounds describe you best? (please check all that apply): 生活在加拿大的人来自许多不同的文化，血统和种族背景。哪一个（哪一些）背景最符合您？

Yes 是 No 否

Are you Caucasian 高加索/白人? ○ ○

Are you Chinese 中国血统? ○ ○

Do you have multiple ethnic backgrounds 多重背景? ○ ○

Feel free to make other comments about your background...

欢迎您增加关于您背景其他的解释。。。

10) Where were you born? 您在哪里出生？

○ The People's Republic of China 中国

○ Taiwan 台湾

○ Hong Kong 香港

○ Singapore 新加坡

○ Indonesia 印尼

○ Vietnam 越南

○ Canada 加拿大

○ Other, please specify 其他, 请说明: _____

11) Where was your mother born? 您的母亲在哪里出生？

○ The People's Republic of China 中国

- ☐ Taiwan 台湾
- ☐ Hong Kong 香港
- ☐ Singapore 新加坡
- ☐ Indonesia 印尼
- ☐ Vietnam 越南
- ☐ Canada 加拿大
- ☐ Other, please specify 其他, 请说明: _____

12) Where was your father born? 您的父亲在哪里出生?

- ☐ The People's Republic of China 中国
- ☐ Taiwan 台湾
- ☐ Hong Kong 香港
- ☐ Singapore 新加坡
- ☐ Indonesia 印尼
- ☐ Vietnam 越南
- ☐ Canada 加拿大
- ☐ Other, please specify 其他, 请说明: _____

13) How many years did you live in a Chinese-speaking community? 您生活在一个华人的环境多少年?

- ☐ Less than 10 years (不到 10 年)
- ☐ 10-15 years (10-15 年)
- ☐ 16-20 years (16-20 年)
- ☐ 21-25 years (21-25 年)
- ☐ More than 25 years (超过 25 年)

14) How many years have you lived in Canada? 您在加拿大生活多少年?

- ☐ Less than 5 years (不到 5 年)
- ☐ 5-10 years (5-10 年)
- ☐ 10-15 years (10-15 年)

- ☐ 16-20 years (16-20 年)
- ☐ 21-25 years (21-25 年)
- ☐ More than 25 years (超过 25 年)

15) Please describe any additional aspects of your personal cultural background that you would like to share with the research team.

请描述您想与本次研究小组分享的个人背景或经历（可以是任何方面）。

16) How comfortable are you with Western culture? Please rate between 1 to 5, where 1 = very uncomfortable, 5 = very comfortable

您生活在西方文化感觉轻松自在吗? 1 = 非常不轻松, 5 = 非常轻松

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

17) How comfortable are you with Chinese culture? Please rate between 1 to 5, where 1 = very uncomfortable, 5 = very comfortable

您生活在中方文化感觉轻松自在吗? 1 = 非常不轻松, 5 = 非常轻松

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

APPENDIX C: Bicultural Identity Integration Scale – 2R (BIIS-2R)

Instructions: As a person of Chinese heritage living in Canada, you have been exposed to at least TWO cultures; your own heritage or ethnic culture and the mainstream, dominant Canadian culture. Thus, you could be described as a bicultural or multicultural individual. The experience of having and managing two cultures (or more) is different for everybody, and we are interested in YOUR PARTICULAR EXPERIENCE. Please use the scale below to rate to what extent you agree or disagree with the following statements by checking the appropriate number. Please rate all statements, even if they seem repetitive to you. Try to avoid using “Not sure” if possible. There are 3 pages in total.

说明：作为一个生活在加拿大的华人，您至少接触到两个文化；您的祖国或民族文化和主流的加拿大文化。所以，您可以被描述为一个双重文化背景人或多种文化的人。每个人对于拥有或掌管两个(或多种)文化的体验都有所不同，我们希望了解您独有的亲身经历。请根据您的经历，在以下表格选出与您情况最符合的程度。请记住并没有正确或错误的回应。请给每个语句作出选择，即使有些看来好像是重复的。如果可以，请避免选择“不确定”。总共有三页。

Example Questions:

1) I find it easy to harmonize Chinese and Canadian cultures.

我觉得很容易协调中国文化和加拿大文化。

- ☐ 1 Strongly Disagree 非常不符合
- ☐ 2 Disagree 相当不符合
- ☐ 3 Not Sure 不确定
- ☐ 4 Agree 相当符合
- ☐ 5 Strongly Agree 非常符合

6) I feel torn between the Chinese and Canadian cultures.

我感觉自己受缚于中国文化和加拿大文化之间。

- ☐ 1 Strongly Disagree 非常不符合
- ☐ 2 Disagree 相当不符合
- ☐ 3 Not Sure 不确定
- ☐ 4 Agree 相当符合
- ☐ 5 Strongly Agree 非常符合

12) I cannot ignore the Chinese or Canadian side of me.

我不能忽视我最为中国人或是加拿大人的各一面。

- ☐ 1 Strongly Disagree 非常不符合
- ☐ 2 Disagree 相当不符合
- ☐ 3 Not Sure 不确定
- ☐ 4 Agree 相当符合
- ☐ 5 Strongly Agree 非常符合

17) I find it difficult to combine Chinese and Canadian cultures.

我觉得很难结合中国和加拿大文化。

- ☐ 1 Strongly Disagree 非常不符合
- ☐ 2 Disagree 相当不符合
- ☐ 3 Not Sure 不确定
- ☐ 4 Agree 相当符合
- ☐ 5 Strongly Agree 非常符合

Scoring information:

1. To calculate Harmony vs. Conflict subscale scores:

- a. The Harmony items are # 1-5; the Conflict items are # 6-11
- b. Reverse score the Conflict items
- c. Add Harmony and Conflict items
- d. Divide the total by 11 to get subscale score

2. To calculate Blendedness vs. Compartmentalization subscale scores:

- a. The Blendedness items are # 12-16; the Compartmentalization items are # 17-20
- b. Reverse score the Compartmentalization items
- c. Add Blendedness and Compartmentalization items
- d. Divide the total by 9 to get subscale score

Note. English adapted from “Bicultural Identity Integration Scale-Version 2: Development and validation,” by Q.-L. Huynh and V. Benet-Martínez (2010), manuscript in preparation. © 2010, Huynh and Benet-Martínez. Used with permission. Chinese translation adapted from “Conceptualizing psychological processes in response to globalization: Components, antecedents, and consequences of global orientations,” by S. Chen, et al. (2015). ©2015, the American Psychological Association. Chinese translation of instructions © 2016, Kate Halvorson

APPENDIX D: Washington University Sentence Completion Test (WUSCT)

Instructions: The following sentences are incomplete. Please finish each sentence using the language of your choice, English, or Chinese, or mixed. Notice that there are 5 pages. Please make sure you have completed all of them. There are no right or wrong responses. Feel free to finish the sentences any way you want to. “He” or “She” can refer to anyone; just think of anyone you wish.

说明：下面的句子是不完整的。请补充完整下列每个句子，用中文或英文，或中英混合。请注意，总共有五页。请确定完成所有的句子。请记住并没有正确或错误的回应。所以请您自由填写下列句子。“他”或“她”可以描述任何人，请随意选择任何一个人。

Example Questions:

1) When a child will not join in group activities... 当一个孩子不加入集体活动时...

2) Raising a family... 抚养一个家庭...

20) Men are lucky because... 男人很幸运，因为...

36) A woman (man) should always... 一个女人(男人)应该总是...

Note. Adapted from “Measuring ego development” by L. X. Hy and J. Loevinger (1996), Mahwah, NJ: Lawrence Erlbaum. Adapted with permission. Chinese translation © 2016, Kate Halvorson. To obtain a copy of the full bilingual instrument, contact Kate at ChineseBiculturalStudy@gmail.com

APPENDIX E: Scales of Psychological Well-being (SPWB)

The following set of questions deals with how you feel about yourself and your life. Please remember that there are no right or wrong answers. Please choose the most appropriate number for each sentence. There are 2 pages total.

请根据您的经验与以下陈述相符合的情形，来选择其中一种符合程度即可。请记住并没有正确或错误的回应。总共有两页。

Example Questions:

1) I enjoy personal and mutual conversations with family members or friends.

我喜爱与家人或朋友聊天和分享个人话题。

- ☐ Strongly Disagree 完全不符合
- ☐ Disagree Somewhat 相当不符合
- ☐ Disagree Slightly 有点不符合
- ☐ Agree Slightly 有点符合
- ☐ Agree Somewhat 相当符合
- ☐ Strongly Agree 完全符合

2) People would describe me as a giving person, willing to share my time with others.

人们形容我是个肯付出的人，愿意花时间在他人身上。

- ☐ Strongly Disagree 完全不符合
- ☐ Disagree Somewhat 相当不符合
- ☐ Disagree Slightly 有点不符合
- ☐ Agree Slightly 有点符合
- ☐ Agree Somewhat 相当符合
- ☐ Strongly Agree 完全符合

Note. Response format is the same as the format used in Appendix C. English adapted from “Happiness is everything, or is it? Explorations on the meaning of psychological well-being,” by C. D. Ryff (1989), *Journal of Personality and Social Psychology*, 57(6), pp. 1069-1081. ©1989, the American Psychological Association. Chinese adapted from “Reliability and validity of a shorter Chinese version for Ryff’s psychological well-being scale,” by R. H. Li (2014). Used with permission. © 2016, Health Education Journal. Chinese translation of instructions © 2016, Kate Halvorson

APPENDIX F: Invitation Protocol

Trinity Western University
Graduate Program in Counselling Psychology
7600 Glover Road, Langley, B.C., V2Y 1Y1

Project Title: Journeying through landscapes of bicultural living

Researcher:

Name: Kate Halvorson, Huaren bilingual researcher

Department: Counseling Psychology

Contact info:

Hello,

We want to hear your story! If you have spent a significant amount of time living in a Chinese speaking community and living in Canada; and you consider yourself to be a person of two or more cultures; and you are an adult at least 19 years of age, please join our study!

The purpose of this study is to learn about the mixed cultural experiences of Chinese-Canadians in relation to your life experiences, personal development, and well-being. The information you provide through your participation in this study may contribute to greater scientific understanding of biculturalism and multiculturalism.

Procedures:

The online survey typically takes 45-90 minutes to complete. This survey does not require you to identify yourself by name and your responses will be anonymous. **Both English and Chinese versions of the survey are available.**

Participation in this project entirely voluntary and you have the right to withdraw from the project at any time.

If you or someone you know might be interested in participating in this research study, please pass along this information and have them contact us, either by phone or email.

Thank you, Kate Halvorson

APPENDIX G: Informed Consent Form

Project Title: Journeying through the landscapes of bicultural identity processes

Principle Investigator: Kate Halvorson, MA Counselling Psychology student

Department: Counseling Psychology

Contact info 联系信息:

Supervisor: Marvin McDonald, PhD, Registered Psychologist

Purpose: You are invited to participate in this study to explore your experiences in living and adapting to your life in Canada. Our goal is to learn about how you make sense of your immigration and bicultural experience. Your experience and opinions shared in this study can contribute to knowledge of multiculturalism and may help foster greater sense of community among Chinese and mainstream communities in Vancouver.

[说明: 如果您对这份表格或本次研究项目有任何问题, 请您按以上联系信息直接与我们研究小组沟通。]

Procedures: You will be asked to complete an online survey consisting of a background form and three questionnaires concerning your experiences as an immigrant living in Canada and how you feel about yourself and your life. The survey typically takes 30-60 minutes to complete. There is also an option for you to complete this phase with paper and pencil format if you prefer.

Potential Benefits: For most participants in projects like this, reflections from the questionnaire can help them to appreciate accomplishments made in adapting to a new culture and gain deeper insight into their lives. In addition, most participants find it personally rewarding to know that they are contributing to the greater scientific understanding of biculturalism. Finally, many participants experience the research in these areas as reassuring because they can talk about sensitive topics in a safe and respectful environment.

Potential Risks: The online scales include personal questions in the domains of identity, maturation and well-being that could sometimes be potentially embarrassing, including the possibility of being reminded of uncomfortable memories. However, these risks are not different from the kinds of risks encountered in everyday life. You have the right to stop participating in the project at any time. In addition, you have the opportunity to comment on all of the scale items. Most people find this process reassuring because they have the opportunity to explain themselves. Should you feel any discomfort, distress or have any concerns anytime during the interview and throughout the study, please feel free to inform the interviewer or anyone on the research team.

If you have any ethical questions regarding this study, you may contact Ms. Sue Funk in the Office of Research and Faculty Development at Trinity Western University

Confidentiality: Your identity will be kept in strict confidence within the limits of the law. Confidentiality may be breached in cases of suspected child abuse, if someone's life is in danger, or research records are subpoenaed by a court of law. Upon signing of the Informed Consent Form, you will be assigned a pseudonym (unless you choose to be identified by your real name), which will be used in all written and electronic records. The online results will be stored on FluidSurveys database. No identifying information will be linked with the participants' responses. If you do not wish to have your contact information stored on a FluidSurveys server, you may contact the principle investigator via email or telephone indicated at the beginning of this form. Any information that is obtained in connection with this study will remain confidential and will be disclosed only with your permission or as required by law. All files will be kept in encrypted storage with access limited only to research team member dealing with the specific portions of the data. The principle investigator will be managing all data files and access under the supervision of the research supervisor. All data will be retained indefinitely in anonymous form for contributions to future research in the field.

Compensation: We would like to honour everyone who chooses to be a part of this project by offering a draw. Upon signing this Informed Consent Form, you will be entered into a draw for one of at least three \$50 gift cards as a token of gratitude for participating in this study.

Consent: Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time without jeopardy. Should you choose to withdraw from the survey, you may do so by simply closing your Internet browser at any time. Your information will be automatically withdrawn from the study and not recorded. Once you click "Send form" at the end of the survey, you will no longer be able to withdraw from the study, as your responses will be automatically and anonymously stored in the system. It is possible that some participants may choose to withdraw after their online survey have been submitted. In this case, responses from participants who have identified themselves on their surveys will be deleted. For those participants who have not identified themselves, their data is unable to be identified or deleted, because they will remain completely anonymous.

By clicking "NEXT" you are indicating that you consent to participate in this study and that your responses may be put in anonymous form and kept for further use after the completion of this study. You may print a copy of this consent form for your own records.

Date: October 26, 2015

Please enter your contact information (phone # or email address) if you wish to be entered for a draw for one of at least \$50 gift certificates from T&T Supermarket.

如果您希望参加我们抽票活动 (\$50 大统华礼卡), 请您在下面填写您的联络讯息:

APPENDIX H: Debriefing Script

☒ 简体中文
☐ 繁體中文

Thank you!
谢谢您!

Once again, please accept our sincere gratitude for taking part in this study to explore the bicultural experiences of Chinese-Canadians living in Canada. The personal insights you shared will be used to enhance the understanding of people with similar background. The knowledge obtained may enable helping professionals to deliver more effective service to biculturals in the future.

再次诚心感谢您参与此次论文研究调查。作为生活在加拿大的华人，您的文化经历和体验会帮助我们更深入地了解与您背景相似的人。我们的研究果实将会协助帮助专业人士提供更加有效的服务给多种文化的人。

If you would like to be notified about the results of this study, please enter your contact information below:

如果您想收到我们研究调查的结果，请在下面填写您的联系信息。

Type here 请输入

APPENDIX I: Interpretative Strategies for Transcription, Translation, & Adaptation

Project protocols

Intentional strategies are beneficial for identifying culturally embedded or distinctive experiences, contexts, and frames in multilingual research. Interview protocols, team-based debriefing approaches, research journals, researcher stance debriefing tactics, informant consultation, and social contextualization offer viable resources for informing research practices. Because salient aspects of many participants' experiences are unspoken, tacit, or deeply contextual, interview practices, translation-interpretation protocols, data gathering processes, and analysis strategies are often enhanced through adaptations to address unspoken meanings. Research models and paradigms with particular relevance to psychological modes of inquiry in multilingual &/or multicultural investigation include Personal Construct Theory, voice-centred feminist inquiry, hermeneutic versions of grounded theory, socio-cultural models inspired by Vygotsky, dialogal phenomenology, and many variations of ethnography. Typically research teams are wise to tailor tactics to fit well with guiding questions for research and with community settings and contexts relevant for specific investigations. The following protocol guidelines are offered to inform research design and procedure for multilingual research (July, 2016, draft, M. McDonald). Although many of these guidelines can apply when engaging differing linguistic registers or discourses, the formulations offered here talk about 'language' distinctions where shared intelligibility is at low levels.

Translation & interpretation process outlines (formulated for English-language-based research team activities)

1. Focal translation direction: Source-language(s) to English as target-language, grounded in cyclical-spiral and back-translation sensibilities
2. Language proficiency profiles: For much cultural psychology research, most research team members will contribute by drawing upon first-hand experience of residing in multiple communities differing in language and culture, at least for substantial periods of sojourn and engagement in local community life. Presumably, a profile of sufficient team member competencies will minimally involve (a) bilingual and bicultural experience involving source-language culture and communities relevant to the domains under investigation, and (b) English fluency in the domains under investigation. Additional enriching facets of team competencies will include bilingual experience in languages and/or life domains other than those employed in the focal research project.
3. Data gathering: The team will establish contextually sensitive protocols for activities of inquiry, including interviewer training, strategies for recruitment of participants, recording and data protection procedures, ethical resources for supporting cultural sensitivity and respect, liaison with relevant community settings as needed, and so on. Research team debriefing of data gathering activities (interviews, focus groups, psychometric scales, etc.) helps to guide, frame, and contextualize various phases of translation processes.
4. English "draft" reviews: "inquiry phase" (target-language [English] & bilingual review – consider potential for development of "glossaries" for guiding translation with topic- and

domain-salient vocabulary & context descriptions; protocol tailoring in collaboration with research team members; and protocol adaptation to project contexts & situational developments.

5. Translation partner(s): English–Source-language bilinguals with comparable language proficiencies to the interviewer(s) are recruited to review portions of English draft transcripts.
6. Version comparisons & transcription reviews: the generation of edited versions of English drafts are reviewed by bilinguals and/or English-fluent reviewers
7. Revising English transcripts: employing bilingual &/or target-language editors
8. Cultural reviews: additional target-language-fluent researchers explore possible gaps in translation and transcription process in consultation with translators

Multilingual Interviewing & Transcription: Developing protocols

1. Language proficiency profiles: for interviewers, participants, research team members
2. Cultural familiarity profiles: for all project stakeholders, including resources for sustaining respect & ethical reflection
3. Research Team preparations: training, multicultural engagement & debriefing, outlining research journal protocols, team-building
4. Data gathering protocols: identifying focal priorities for inquiry, social ecology of project, establishing recording practices human resource access, including bilingual speakers & cultural consultants with a range of backgrounds; examine relational profiles & formats for recruitment & data gathering.
5. Translation protocols: outlining language profiles for interview recordings; interpretation-translation strategy design; language partner & checking processes; cultural review processes; process debriefing & adaptations; design interactions among interpretive levels & cross-checking opportunities.
6. Translation strategies: Experience-far translation strategies emphasize socially common meanings with wide degrees of familiarity among bilinguals and both source- and target-language communities. These approaches often emphasize formal contexts, stranger-based interactions, and larger numbers of research participants and research team members. Experience-near translation strategies emphasize contextually rich, “thick” descriptions of meanings. These approaches often emphasize extensive immersion in data protocols, focused consideration of implicit meanings, and depth of analysis. [cf. Geertz, 1973]

Cultural Review Processes in Multilingual Research

A key purpose of “cultural review” in research is to identify passages in data components; participant comments, reflections, and feedback to researchers; language use patterns by multilingual participants; and other features of participant engagement with inquiry that may reflect culturally relevant aspects of participants’ activities in sharing their life experience. Some culturally distinctive elements are relatively straightforward to identify and directly shared through the use of specific vocabulary (in any language) or explicit mention of cultural values or expectations (by Participants, interviewers & other data gatherers, key

informants, other research team members, et al.). Other cultural distinctives are less explicit and can be identified by researchers and other reviewers as “unspoken” assumptions or tacit values as they are reflected in data patterns, modes of participant engagement, and so on. The following sections outline procedures for cultural review that illustrate ways to identify and evaluate patterns in data and participant participation in substantively bilingual investigations. Protocols for cultural review can become quite elaborate or can take the form of strategically focused research activities (cf. McDonald, 2007). The following outlines and their components were not all implemented in the present investigation, but are included here as descriptions of a range of considerations that informed the project.

Bilingual questionnaires and scales (for formal instruments grounded in psychometrics)

Backtranslation protocols often rely on principles of item- and scale-equivalence that relegate gaps in translation to error variance in psychometric models. Such protocols frequently use monolingual frames for items and scales and then build maps or links between separate monolingual versions. However, multilingual people and groups often engage in multilingual activities with dynamic deployment of text, verbal forms, language registers, and diverse paralinguistic modes of elaboration. Translation paradigms that recognize mutually enriching and clarifying processes in translation, interpretation, and interpersonal interaction offer important benefits in research practice. When promoting rigour in multilingual research, it is helpful to address questions such as ecological validity, translation paradigms, deployment of multiple cultural frames and scripts, and linguistic aspects cultural relevance. A simple strategy already employed in many social settings is the use of multilingual texts (e.g., signage, instructions, product packaging, literatures generated by culturally distinctive communities, and clinical assessment of domains such as health, pain, language proficiency, and so on). Multilingual formulation of items and scales are a minimal adaptation that invites systematic use and evaluation in multiple domains.

Bilingual scoring using the English scoring manual WUSCT (2nd ed., 1996)

The Washington University Sentence Completion Test has been used in multiple languages with substantial attention offered for translation procedures for stems and responses and additional consideration of multilingual development and use of scoring manuals (Hy & Loevinger, 1996; cf. Loevinger, 1998). A valuable feature of the 1996 scoring manual for the English WUSCT is the inclusion of observations arising from the revision of the scoring manual after decades of research in English. For instance, the 1970s and ‘80s was a period of rapid social change in the domains of gender and family relationships in the United States and those changes were associated with adjustments in the second edition of scoring manual. To illustrate, Item 2: “Raising a Family . . .” was placed first on the WUSCT in the 1970 edition “because it seemed among the most innocuous [items]. A later generation of women, particularly those training to be professionals, seemed to be put off by the question, so it is no longer the lead item.” (p. 93, Hy & Loevinger, 1996). The English language scoring manual is richly informed by adjustments reflecting social changes between the first and second editions. These observations in the second edition scoring manual offer a substantial range of informative of applications of ego

development theory to scoring processes and procedures. The development of scoring manuals for each language willing continue to be a core strategy for the long term development of multilingual research in ego development. At the same time, existing research over time and among different language communities can help guide the effective use of the WUSCT with multilingual participants.

For instance, in Kate Halvorson's study of Chinese-Canadians, several procedures were adopted to guide theory-grounded bilingual scoring with systematic cultural review. The sentence stems were presented in Chinese-English bilingual format and participants were encouraged to respond in the language(s) of their choice. Provision was made for participants to explain their answers or to comment on the stems or scale. Several scorers were recruited and participated in scoring training, including two Chinese-English bilinguals and an English speaker with work experience in a setting with a majority of Chinese-English bilinguals. The core research team debriefed scoring of subsets of English response protocols, Chinese response protocols, and combined language protocols. This systematic cultural review protocol enabled the research team to examine translation gaps between Chinese and English, social and linguistic conventions, and connections between participant backgrounds and WUSCT responses. Comments by participants about WUSCT items were also reviewed, providing insight into individual and group response patterns. Finally, the majority of WUSCT protocols were reviewed thematically to inform theory-based scoring of categories and levels for specific items. Team-based debriefing of scoring during training and during scoring of participant protocols contributed to convergence of scoring by the primary scorer. These systematic cultural review and debriefing processes provided a coherent conceptual clarification for applying ego development theory to the sample of Chinese Canadians.

Translation & Interpretation Gaps in Bilingual Interview Transcription

In monolingual interviews, many kinds of communication gaps or misunderstandings can emerge between interview and interviewee. Topical variability in levels of awareness is quite common (e.g., many adults in Canada are more familiar with discussing their occupational activities than they are their personal philosophy of life). Research topics that unfamiliar as foci of conversation can lead to misunderstandings. Social distance and differences of many kinds can lead to gaps through unfamiliarity with specific social contexts (e.g., job experience, community settings, social class). Topical constraints can also foster communication gaps when cannons of respect or politeness limit directness with which certain topics can be address (including socially undesirable topics, intimate topics, and so on). Interviewer training, research practices such as confidentiality, and community support are typical resources employed to increase access to life experiences that would be impolite or disrespectful to address in public relationships. Gaps can also emerge between interviewer-interviewee conversations and transcript readers in relation to transcription conventions as well as all social distance factors. In many Canadian research settings, transcription conventions allow for minimal degrees of omission or other "editing" of interview content in terms of (a) relevance to the research question, or (b) maintenance of confidentiality. The greater fidelity sometimes offered by video recordings of interviews in relation to audio recordings relates to relevance of greater access to more paralinguistic features of interview conversations. Transcription practices can allow for the incorporation paralinguistic elements of interview process of either recording-based or

interviewer-memory-based observations. When multilingual or multicultural contexts emerge in research interviews, cultural and linguistic diversity can exaggerate and/or ameliorate such influences. Multicultural research teams typically develop protocols for addressing all such concerns.

It is helpful to illustrate some of the ways that bilingual research can take into account pertinent facets of interpretation, translation, and transcription. In oral interpretation, gaps can emerge in relation to constraints of “real time” interpretation, for instance, when extended explanations of nuance or context disrupt a flow of communication. Text-focused translation gaps emerge at many levels, including distinctive vocabulary in either language, losses emerging from implied sonic nuances (e.g., when translating sonically distinctive vocabulary, tones in tone languages, or dynamics of stress patterns), grammatical ambiguity within or between languages (e.g., ambiguity of singular/ plural in English second person pronoun – “you”; loss/ambiguity of status / relationship markers when omitting honorifics), and so on. Monolingual transcription protocols also vary in the degrees of emphasis on discursive patterns (stress patterns, gestural accompaniments, timing and pauses in speech, etc.) and semantic patterns (e.g., “smoothing” of transcripts to make the contextually-grounded meanings more readily evident to a reader of the transcript). Any or all of these facets of bilingual or multilingual may involve differing degrees of cultural salience for various combinations of research questions, interview settings, social environment, and researchers. In principle, research teams formulate and adopt interpretation, translation, &/or transcription practices that establish priorities among these various considerations in relation to the focal research question.

Tailoring Translation, Interpretation, and Transcription procedures

In the present study, the methodology chapter outlines a number of strategies implemented to address these sets of concerns. For instance, the translation-transcription process was conducted in phases, “literal” translation, “functionally equivalent” translation, and identifying of “losses” in translation. Translation partners were recruited during the early phases of translation-transcription to help guide the process. Research team discussions addressed both principles and content of the translation process. Elements of cultural gaps emerging from the translation process were revisited at several points throughout the analysis process.

An example of translation gaps would be [*insert Chinese Characters*]: “to remain flexible and devise a suitable solution when problems arise.” The origin of this particular expression comes from a well-known martial arts novel series written by a contemporary Hong Kong author in the 1950s, Jin Yong (金庸). His novels are still widely read and made into TV series today. The expression describes how a person is wise to remain pliable and flexible when combating her enemies using martial arts. When she is attacked with style that employs strikes with fists or feet, she would observe the strike and deflect it in a way that is most effective and usually in the most energy-conserving manner. Brute force may not always be the most effective in combat but remaining flexible and clever in using energy wisely may help overcome enemies with the least effort. When the cultural origins of the expression are removed, the rich sense of wisdom in using soft power is distorted. Certainly insights from Western traditions reflected in the slogan “brains over brawn” celebrate the capacity of wisdom and cleverness to triumph over brute force. And although Eastern traditions of martial arts have become familiar to people around the world,

the distinction between “soft” and “hard” martial arts traditions is not widely understood. Furthermore, the cultural transformation of Eastern martial arts traditions into “sports” in Canada, the USA, and Europe, for instance, tends to compartmentalize martial arts practices, losing the holistic sensibilities of character development, way of life, and spiritual maturity inherent to many Eastern traditions of martial arts. In contemporary Hong Kong and presumed in the work of Jin Yong (金庸), this broader, whole-person understanding of human nature is evoked by the phrase . Thus even attempts in English translations to draw upon shared metaphors such as “the strength of the willow” tends to seriously distort the significance of the phrase in Chinese, and specifically in the context of the interviews conducted for this study.

Another illustration of important translation gaps arises in the expression (insert Chinese): “someone who came from Shung Tak in the Province of Guangdong.” When the term is pronounced in Cantonese, it sounds like (insert Chinese), which means “someone who is accommodating and easygoing.” The former expression (insert Chinese) is used phonetically in a humorous way and the humour relies directly on pronunciation. An accurate semantic translation of the term conveys neither the intended humour nor meaning of the phrase as used in the interview.

In both of these examples, it is both possible and necessary for translation protocols to require the insertion into transcripts of the kinds of cultural-linguistic glosses and explanations that identify phonetic humour, unspoken or implied meanings, relational dynamic conveyed by honorifics, and other contextually embedded meanings. Such glosses help to identify in the transcript those features of each interview that are not directly translatable into English. For the purposes of qualitative research, however, adding glosses and notes into transcripts, regardless of the basic intellectual and historical adequacy, does not suffice to convey the experience-near richness required for effectively conducting bicultural interviews or for bilingual/ bicultural analysis of interview protocols. Identifying translation losses helps research teams both to maintain cultural grounding for conducting analyses and to help evaluate potential qualifications on results and interpretations. When appropriate, cultural review protocols can be developed for systematic clarification of culturally distinctive dimensions of results or of research processes. The existence of translation gaps is one important criterion to consider when tailoring translation practices or designing cultural review protocols.

Note: Adapted by M. McDonald from Appendix F, by M. J. J. McDonald & M. Chau, in M. Chau (2008), *Biculturalism and the process of change in core personal values among female Asian adult immigrants*, unpublished master’s thesis, Trinity Western University.